

6305
18, 1851,

11-1
14-1

KANSAS FARMER

NEBRA SKA
MISSOURI
IND. TER.
OKLAHOMA
COLORADO
KANSAS

Volume XLIV. Number 7

TOPEKA, KANSAS, FEBRUARY 15, 1906

Established 1863. \$1 a Year

CONCRETE PORCH FLOOR.

Editor Kansas Farmer—I want to put a concrete floor in a porch. Will you please give me some instructions with regard to the amount of each ingredient to use for the rough floor, and what to use for the finish. Please answer through your valuable paper.

Douglas County. J. SMITH.

The materials used in concrete construction are usually Portland cement, sand, and broken stone. To these steel rods have recently been added and have proven admirable in contributing to strength and durability. The great Melan arch bridge over the Kansas River at Topeka is a concrete steel structure. No limit is placed on the weight that may be placed upon it, and no sign cautions against fast driving. During the great flood a torrent raged around either end of this bridge, the street railway bridge just up stream went out and with great quantities of drift bumped against the Melan bridge, but it stood an island in the mad waters and was uninjured except by the washing away of approaches. In building the new State printing office, now nearing completion at Topeka, concrete columns one foot square, reinforced with steel rods, were erected on cast-iron footings. On top of these columns reinforced concrete beams and a reinforce concrete floor were constructed. On top of these another set of reinforced concrete columns, another set of reinforced concrete

beams and another reinforced concrete floor were constructed. These concrete floors were tested soon after completion by piling immense weights of bricks upon them. The whole has since been enclosed with brick walls, making a beautiful building which is practically fireproof.

The proportions in which materials for concrete are used vary greatly. In the State Printing Office the proportions are 1 measure of Iola Portland cement, $2\frac{1}{2}$ measures of river sand and 5 measures of broken stone.

Where the broken stone is not used it is doubtless allowable to increase the proportion of sand. Excellent results are obtained with 1 of cement to $3\frac{1}{2}$ of sand. One of cement to 4 or even 5 of clean sand may be used in some cases where great strength is not required.

If our correspondent had stated the size of the proposed floor and whether it is to be laid upon the ground or on piers, this answer might have been simplified. If the floor is to be laid upon the ground or upon a walled-in area filled with earth, tamp the earth so that it will never settle; make it level, or, if the floor is to slope, give the earth foundation the slope designed for the floor; make the top of the earth support four inches lower than the top of the proposed floor. Enclose a space next to the building by 2 by 4's placed on edge. Fill this space with well mixed concrete materials made wet enough to be readily tamped solid. If

no broken stone be used in the concrete, the mortar may be made thin enough to go readily to place, being merely pushed down around the edges with a trowel or paddle. It is perhaps better to finish the section before removing the 2 by 4's. For finishing, some use a mortar made of 1 part cement to 2 parts of screened sand. Others are satisfied with 1 to 3, while still others like 1 to 1. A facing half an inch thick made 1 to 2, troweled hard will be very satisfactory. After this first section of the floor has had time to "set" so as not to be disturbed by removal of the 2 by 4's, another section may be enclosed and made as above described for the first.

If the floor is to be at considerable height above the ground, or if for other cause it is desirable to build it upon "pillars," it will be necessary to construct a temporary support for the floor during construction. This must be made strong and rigid enough to bear the weight and tamping securely. If the porch is eight feet wide and the pillars are eight feet apart, the rear edge of the porch resting on the foundation wall, it will be well to provide a beam along the front edge. This may be 4 inches thick and say 4 or 6 inches deep. Beams may also be provided say, 4 feet apart, reaching across the porch from front to rear. It will be readily understood that provision is made for these beams by making corresponding channels in the temporary floor on

which the cement floor is to be made. Now provide steel rods, say, $\frac{3}{8}$ inch in diameter and of suitable lengths. Heat these at the ends and bend about 2 inches at right angles. When filling the moulds for the beams place two of these hooked rods at about 2 inches from the lower edge of each beam. When the floor is made, steel rods in the concrete are placed, say, 2 feet apart. The rods in the floor should cross the beams. To make a reasonably strong job, place the steel rods in the floor in such manner as to make squares 2 by 2 feet. After such a floor has been in place for a week the temporary support or mould may be removed. The edge of the floor may be given any desired form by providing a suitable mould. The top should be finished as previously described.

FREE ALCOHOL FOR INDUSTRIAL USES.

At its last meeting the National Grange unanimously adopted a resolution asking Congress to remove the internal revenue tax from alcohol that shall have been rendered unfit for beverage purposes. This request has been made by many bodies representing other industrial interests. Some of the reasons for the removal of the tax have been discussed in former issues of the Kansas Farmer. Now comes Congressman Calderhead, of Kansas, with a bill which he has introduced in the House of Representatives. It is as follows:



Champion Herd Percheron Horses, American Royal, Kansas City, 1905. Winner of the \$100 Silver Cup. Herd Headed by Casino 27830 (45462). Owned and Exhibited by J. W. and J. C. Robison, Towanda, Kans., Who Hold Their Great Annual Sale at Wichita, on Wednesday, February 21, 1906.

"A Bill to permit the industrial uses of alcohol and to enlarge the domestic market for farm products."

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

"That on and after the passage of this Act no internal revenue tax shall be levied or collected on ethyl alcohol of domestic production which has been rendered undrinkable or unfit for use as a beverage, prior to withdrawal from distillery bonded warehouse."

"Sec. 2.—The Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe the necessary regulations to carry this Act into effect."

"Sec. 3.—That any person, or persons, who shall rectify or purify ethyl alcohol which has been removed from distillery warehouse free of tax, under the provisions of this Act, so as to remove or separate therefrom by any process whatever the substance, or substances, which have been added thereto for the purpose of rendering such ethyl alcohol undrinkable or unfit for use as a beverage, shall on conviction be subjected to a fine of not less than \$500 nor more than \$5,000, and be imprisoned not less than six months nor more than three years."

THE AMERICAN LIVE STOCK ASSOCIATION.

Denver, Colorado, which has grown to a generous maturity at the foot of the Rocky Mountains and which has heretofore been known more particularly for its mining and railroad interests, was last week the scene of events which were highly significant of a later and greater development than she has hitherto known. During the week beginning January 29, there occurred the largest gathering of representative men whose chief interest lay in live stock that has ever been seen in the Western country. On this occasion there was effected the consolidation of the National Live Stock Association with the American Stock-Growers' Association, which together have a membership of some twelve thousand energetic producers of live stock. There were also held the meetings of the National Wool-Growers' Association, the Colorado Horse-Growers' Association, the Colorado State Horticultural Association, the State Bee-Keepers' Association, The Colorado Farmers' Congress and the United Fruit-Growers' Association of Colorado. These filled the city with active, energetic men who represented all the leading live-stock States of the Union west of Ohio.

The chief interest centered in the effort to reunite the associations which for a year past have been known as the American Stock-Growers' Association and the National Live Stock Association, the latter of which was the parent association. This union was happily effected under the presidency of Murdo Mackenzie of Trinidad, Colorado, and under the name of the American National Live Stock Association.

This new association is characterized by the fact that it is composed entirely by producers of live stock and that commission houses, railroads and packing houses are not admitted to membership. F. J. Hagenbarth, president of the old National Association, was unanimously elected first vice-president of

Table of Contents

Alcohol for industrial uses, free.....	145
Alfalfa bacteria.....	148
Alfalfa in drill rows.....	149
Alfalfa, yellow.....	149
American Live Stock Ass'n, the.....	146
Art and life.....	158
Aunt Kate to Katharine.....	157
Bird, a brave.....	157
Butter-making.....	166
Club, possibilities of the.....	158
Concrete porch floors.....	145
Dairy business, cost and profit of.....	166
Dairy cow, the.....	152
Dog which saves lives a.....	157
Domestic tragedy, a (poem).....	157
Evergreens, planting.....	163
Familiar features of the roadside.....	156
Fellow who can whistle, the (poem).....	157
Fruit and vegetable garden.....	163
Hen vs. the incubator.....	164
Hog, the modern.....	150
Horses, government encouragement of imported breeds of.....	154
Horticulturist, the ideal.....	162
Japanese clover.....	147
Kafir-corn, red or black-hulled.....	147
Listing ground in winter.....	147
More light wanted.....	146
Mulching with straw.....	163
Oats on corn-stubble.....	147
Opportunity (poem).....	156
Pasture, for spring.....	148
Pasturing pigs on stubble-field.....	171
Politeness.....	156
Prairie-dog poison.....	147
Quail, feeding.....	165
Seal corn.....	148-149
Sewing questions.....	147
Sorghum smut.....	147
Test recipes.....	158
Telephone contract, country.....	146
The Tri-County farmers' institute.....	146

the new association, and T. W. Tomlinson, of Chicago, was made secretary.

Mr. Gifford Pinchot, chief of the Forestry Department of the Government, was present as the personal representative of President Roosevelt, and gave assurance that the rights of the cattle men would be carefully looked after and the forestry reserves rigidly handled.

The Live Stock Association went on record in behalf of the Hepburn bill then pending, but since passed the lower House of Congress, and also heartily commended President Roosevelt for his untiring efforts in behalf of the people as against corporate greed. They also commended Secretary Wilson for the vast amount of good work done by his department for the benefit of agriculture and live-stock interests. Other resolutions commended the agricultural colleges of the country for the high quality of their work; endorsed the law giving the President power to make reciprocity treaties with foreign countries; and an extension of the 28-hour law to 26 hours for live stock on the cars.

An executive committee for the American National Live Stock Association was named as follows: J. V. Vickers, Tombstone, Ariz.; Walter Vail, Los Angeles, Cal.; E. M. Ammons, Littleton, Colo.; J. C. Johnson, Higbee, Colo.; H. C. Wallace, Des Moines, Iowa; A. L. Ames, Buckingham, Iowa; W. J. Todd, Maple Hill, Kans.; M. M. Sherman, Crawford, Kans.; Henry S. Boice, Kansas City, Mo.; Captain J. T. Brown, Birney, Mont.; David G. Browne, Fort Benton, Mont.; W. G. Comstock, Ellsworth, Neb.; Robert Taylor, Abbott, Neb.; C. M. O'Donnell, Bell Ranch, N. M.; Chas. Schleiter, Clayton, N. M.; I. M. Humphrey, Rapid City, S. D.; F. M. Stewart, Buffalo, Gap, S. D.; Richard Walsh, Paloduro, Texas; W. W. Turney, El Paso, Texas; Captain John T. Lytle, Fort Worth, Texas; M. K. Parsons, Salt Lake City, Utah; Ora Haley, Laramie, Wyo.; W. H. Jack, Silver City, N. M.; H. A. Jastro, Bakersfield, Cal.; A. E. DeRicqles, Denver, Colo.; E. S. Gosner, Arizona; Richard Scott, Milwaukee, Ore.

Thus reunited and strengthened this great association of live-stock interests faces the future with every prospect of attaining the rights which belong to it and for which it has so long contended. This is undoubtedly at present the most powerful organization of the kind in the world and its influence for good will be made manifest in the future and will be a thing with which the politicians will have to reckon.

THE TRI-COUNTY FARMERS' INSTITUTE.

The Wellsville meeting of the Tri-County Farmers' Institute was held February 8 and 9 in the opera house. E. S. Kirkpatrick presided. The proceedings opened with an invocation by Rev. George Hine. The address of welcome by Mayor W. H. Moherman was responded to by J. B. Dickson of Edgerton.

At the afternoon session "The Farm Orchard" by B. F. Smith, of Lawrence, brought out a lively discussion led by Henry Rhoades, of Gardner. In an address on "Health of Live Stock," Dr. F. S. Schoenleber, of the State Agricultural College, brought out many useful points. Diseases of the horse attracted most attention. The discussion was led by Dr. Elliott, of Miami County.

The evening session opened with a paper on preventive medicine by Dr. G. N. Jewett, of Edgerton. The second paper of the evening on "The Grange, Its Relation to the Farmer," by I. D. Hibner, of Olathe, was followed by the closest attention from the large audience.

Dr. Schoenleber followed with a highly appreciated address on "Ethical and Economic Phases of Pure-Bred Live Stock."

The first address on Friday morning was by E. C. Cowles, of Lawrence, on "The Cost of Dirt Roads." Copies of this most excellent address were desired for distribution. The editor of the Kansas Farmer stated that he would be glad to print Mr. Cowles' address in his paper and send copies to all whose names and addresses should be furnished by the secretary of the institute. "Modern Conveniences in the Farm Home" was the title of a paper by E. B. Cowgill, editor of the Kansas Farmer. In it were shown plans for installing in even a small farm home the modern improvements known as bath-room fixtures. The arrangement was illustrated by drawings. The five points, viz., place to put them, water supply, drainage, heat, and ventilation, were considered and the cost was shown to be not prohibitive.

The afternoon session was opened by the election of officers which resulted as follows: President, Henry Rhoades, Gardner; vice-president, J. F. Hastings,

Edgerton; secretary, E. Essex, Gardner. The subject of "Corn Breeding" was then taken up in an address by E. B. Cowgill. The numerous questions asked indicated the deep interest farmers are taking in this subject. The next address was by Mrs. T. L. Hogue, of Olathe, on "Shadows." With vivid word pictures she portrayed some of the shadows that may come over the lives of persons on account of wrong or inefficient attention in the home during youth. This address appealed strongly for a better citizenship, grounded on a better appreciation of responsibility to youth. It naturally verged into a lofty patriotism and ended with a series of magnificent apostrophies to the flag.

The evening session began with "Incidents and Observations of My Travels" by W. E. Kibbie, of Princeton, and was followed by a paper on "Agriculture in the Common Schools," by C. A. D. Jacobs, principal of the Wellsville schools. This paper was so well liked that request was made that it be published in the Kansas Farmer.

The program was interspersed with declamations and music; the weather was ideal; the attendance was large and enthusiastic from start to finish, many claiming this to be the most successful meeting in the history of the famous Tri-County Institute.

COUNTRY TELEPHONE CONTRACT.

Editor Kansas Farmer:—Will you kindly give a little information through the columns of your much valued paper?

There are a number of farmers in this vicinity who are building telephone lines. They buy their own phones and build their own lines. Some of the lines are owned by one farmer, with as many as 12 phones. They have been encouraged in this by a local telephone company who own a few lines in the country, a central station, and are agents for the Bell Company's toll lines at this place. Their offer is to give us the privilege of "Central" at 50 cents per month, or \$6 per year, payable semi-annually. After we are installed with Central, we are asked to sign a contract for three or more years at \$6—some as high as five years—just as they can persuade them to do, agreeing not to attach to another company except by written consent from them (the phone company). Some are refusing to sign for more than one year. There was nothing said about three years in the bargain, or talk, until after our wire was installed in Central. What are the merits of the contention? Please give any other information along the line of farmers' telephone building.

A SUBSCRIBER.

Harvey County.

If the writer were one of these owners, he would want to bind the central company by a contract as long as possible at the rates named. The danger is, that after you have your connections made on a contract, say, for 12 months, the central company may ask a much higher price on the expiration of the contract. The \$6 rate is very reasonable. The fact that you must agree that you will not join your lines to any other Central need not be an objection. Indeed, the assurance that there will be but one system is valuable. In Topeka we have two systems. To reach all telephone users we are obliged to install two phones. The cost of each is in no case less than \$18 per year. Every user would rather pay a higher price if the work could be confined to one system.

The Kansas Farmer's advice is to get the central company to contract for five or even ten years if it will.

FARMERS' INSTITUTE DATES.

Next week a short series of farmers' institutes will be held in the northeastern part of Kansas. Subjects of special emphasis by lecturers from the Kansas Agricultural College will be Corn Breeding and Orcharding. Following is the itinerary: Frankfort, Monday, February 19; Centralia, Tuesday, February 20; Oneida, Tuesday-Wednesday, February 20-21; Hiawatha, Thursday, February 22; Troy, Friday, February 23.

A subscriber inquires whether there is in Kansas a mutual insurance company for houses and barns. There is. The Alliance Mutual Insurance Company, of McPherson, Kans., has been doing a successful business for many years. The advertisement of this company will, hereafter, make such inquiry superfluous. Other mutuals will find it to their advantage to "hang out their signs" in the advertising columns of the Kansas Farmer.

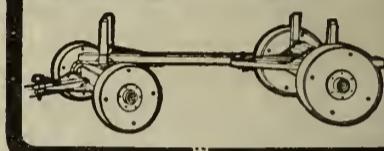
The Santa Fe has just issued a most attractive circular giving information about its California service. This can

Every farmer knows the labor-saving advantages of a low-down, wide-tire, short-turn, roomy wagon. The point he wants to decide is whose make will give him the most service. If he will investigate the Farmer's Handy Wagon that is made in Saginaw, his own good judgment will direct him to a wise purchase. We can't give detail descriptions of it here. We can't tell you all the reasons why it is better value for the money, why it lasts longer, carries bigger loads, requires less repairs, but all this and more is in our new 1906 wagon catalogue which we will send free on request. A postal brings it and it will pay you to send for it right now. It's full of practical wagon buying advice. Sold by all dealers.

**FARMER'S HANDY WAGON CO.,
Saginaw, Mich.**

Branches, Kansas City and Des Moines.
Also makers of Farmers Hay and Stock
Racks and All-steel Frame Silos.

WOOD OR STEEL WHEELS



be had for the asking. Those who contemplate a trip should address the Passenger Department, Santa Fe Route, Topeka.

Kansas Negro Farmers Organize.

At the home of J. G. Grove, the negro who has the name of the "Potato King of Kansas," a number of negro farmers met on February 8 and organized a society which will be known as the Sunflower State Agriculturists. The organization will include all of the negroes who are farmers in the State and the object will be to advance the interests of the negro farmers.

The officers elected were: C. A. Grove, of Edwardsville, president; Arthur Emery, of Lawrence, first vice president; Caspy Hultz, of Lawrence, second vice president; Ida May Grove, of Edwardsville, third vice president; T. E. Harvey, of Lawrence, secretary; Robert Keith, of Topeka, treasurer. The president is a graduate of the Kansas State Agricultural College.

More Light Wanted.

Editor Kansas Farmer:—You say, in answer to A. C. Jones, January 26: "There is nothing equal to a continuous concrete floor for a stable." Now, I would like to use concrete, but it is claimed by some that it is too cold for all kinds of stock, including mine. One writer says it is all right if the floor has a water-proof finish and proper slope. It is too expensive to put in such a floor and then find it detrimental; the drainage part is all right. I would like to hear from parties using them.

At the stock-breeders' meeting Mr. Sherman said, "Don't wait for it (alfalfa) to cure in the field, but just rake it with an ordinary rake and place it in the barn." He says, "I have tried it in a small mow and a large mow, and I never had a case where it mow-burned, as they call it." Now that reads easy, but we are afraid of that kind of work in this part (Republic County), on the first crop, at least. He is all right on the feeding qualities, etc.

I wish Mr. Sherman would inform us all if his hay is free from dust, what kind of barn he has, if air-tight, etc. If a safe and proper way of curing alfalfa can be found, then millions more will be added to its value in Kansas. More light on both subjects, please.

Republic County. W. M. MOORE.

The Right Road

from Kansas City to Chicago, St. Paul, Minneapolis, Dubuque and Des Moines is the Chicago Great Western Railway. Three well equipped trains daily. Best of service. For further information apply to Geo. W. Lincoln, T. P. A., 7 W. 9th St., Kansas City, Mo.

Agriculture**Oats on Corn-Stubble.**

There is a question I should be very glad to get your opinion upon, if it is not covered in the bulletins you send me. If it is answered in the Kansas Farmer I shall see it.

I plowed a piece of wheat-stubble last fall rather late for wheat, and as it kept pretty dry I did not sow it to wheat. Will that land be as good or better for oats this spring than stubble-land that was not plowed, or land that raised corn last year?

If the stubble-land is as good or better, shall I plow it or disk it, or both before seeding? A. H. RYAN.

Clay County.

It will depend somewhat upon the season and the fertility of the soil as to which piece of land will produce the best crop of oats next season. If the land is quite fertile and the season is sufficiently favorable for growth, the oats on the fall plowing will be more apt to lodge than the oats on spring-plowed wheat-stubble land, or on the corn-stubble land. As a rule, I would prefer the fall plowing or the corn-land rather than the unplowed wheat-stubble land for seeding to oats next spring. It is necessary to sow oats very early and if the land must be plowed in the spring the oats are not likely to be sown so early as will be possible to sow on fall plowing or on corn-stubble land. I would as a general rule recommend to disk and harrow the corn-stubble land in preparing the seed-bed for oats in preference to plowing, since by this method of preparation you may secure a more favorable seed-bed than by plowing, and also sow the oats earlier than you would be able to sow if you plowed the land.

From the standpoint of rotation of crops I would prefer to plant the corn after the wheat and the oats after the corn, and if the season is fairly favorable for the production of oats, I believe you will secure as large a yield on the corn-stubble land as on the fall-plowed wheat land.

A. M. TENNEYCK.

Sorghum Smut.

I would like to ask you a few questions about raising cane. I had about 11 acres this year on one side of the field that was just about one-half smut; what is the reason for this? That side is along a small ravine. It has been in cane for three years; this year it was smutted worse than last year and last year worse than the year before. The seed I had was the black, but mixed a little with the red, the field was becoming weedy, but was cleaned up later on and the weeds all cut out. What is the best time to plant cane? What is the best kind of cane to raise for seed and where can a man get the pure seed and at what price per bushel?

Clay County. D. W. LEWIS.

The grain smut of sorghum (*Cen-tractia Sorghi-Vulgaris*) is a fungus disease of the sorghum plant. You observe when you break the smutty grains that they are composed of a large number of dust-like cells or spores; these are really the seeds of the smut. When smutty sorghum is threshed, the smut-balls are broken and the dust-like spores are scattered throughout the threshed seed, some of them no doubt adhering to the sound grains. When such seed is planted in the soil these smut spores sprout with the grain and infect the germinating seed or young plantlet, the fungus or smut-plant growing within the sorghum plant and feeding upon its juices and tissues, and at fruiting time instead of the formation of the sorghum-seed the smut-balls are formed as the fruit of the fungus.

It is possible for clean seed to come in contact with smut spores in a smut-infested soil, but this is not likely to happen. Usually the infection comes from threshing smutty seed with clean seed, or it may result from putting clean seed in a bin which has contained smutty seed.

It is possible to treat sorghum seed and destroy the smut spores the same as with wheat, the formaldehyde treatment being quite successfully used. This treatment consists in thoroughly wetting the seed with a solution of 1 pound of 40 per cent formaldehyde in 30 to 40 gallons of water. The wetting may be done by dipping the seed for a few minutes or by sprinkling the grain spread thick on a floor and shoveling it over until it is thoroughly wet, when it should be allowed to lay

for several hours and then shoveled over again, allowing the grain to dry on the outside, when the seed may be planted.

A better method is to secure clean seed from a neighbor whose seed is not infected with smut, or the farmer may go into the field early in the fall as soon as the sorghum heads are ripe and select the sound heads from the most thrifty plants, keeping them from coming in contact with smutty heads or smutty seed. This is the proper way to select sorghum seed and Kafir-corn seed; if seed were selected in this way there would be little loss from smutty grain. It is possible, of course, to secure some smutty grains by selecting heads of sorghum and Kafir-corn from a crop which is infected with smut, but this is not likely to occur if the largest heads with strong plump seed are selected from strong, well developed plants.

The varieties which have succeeded well at this station are Coleman, Folger, Kansas Orange and Early Amber. The Cavanaugh is also a good producing cane but late in maturing. Of the varieties named the Coleman has given the largest yields of grain and is also one of the best fodder-producers. Kansas Orange is a very excellent fodder cane, while the Early Amber may be recommended on account of its early maturing and good feeding qualities.

For seed-production we usually plant cane about the first of June. For the production of hay or fodder the grain may be sown broadcast or planted in close drills as late as the middle of July and produce a good growth and quality of hay.

Western seed dealers sell seeds of the several varieties named in this letter. You can secure sorghum-seed from almost any western seed-dealer. Perhaps the best way to secure a pure-bred variety is to select the best heads in the field as described above.

A. M. TENNEYCK.

Japanese Clover.

Editor Kansas Farmer:—Seeing some questions in the "Old Reliable" Kansas Farmer some time ago in regard to Japanese clover, and having seen the same near Fort Smith and Van Buren, Arkansas. The past two summers, I thought perhaps I could interest some on that subject. Japanese clover in Arkansas is an annual; but wherever it grows it will come up quickly from seed the next spring. It matters not how closely it is pastured it will make abundant seed for a crop the next year. It grows everywhere through the timber, even where the shale is very heavy. Stock do well on it, but horses slobber very badly. I think it would succeed in a Kansas climate and soil.

It is slow to start in the spring and will not grow much until the weather becomes quite warm. I have seen it grow a foot high on rich bottom-land and very thick, but never saw it cut for hay. It is a legume and is a good enricher of the soil. G. W. LONG.

Morris County.

Seeding Questions.

I have 11 acres of good creek-bottom land that has been in blue-grass for two years. The stand was not very good late last summer, and I plowed it to plant winter wheat but it was dry at the time. The field was cloudy and rough and when it rained it was too late to plant wheat. Would you advise me to plant macaroni wheat in it this spring? If so, where can I secure the seed and what will it cost? Please give me your advice whether it is better to plant that kind of wheat or alfalfa.

W. N. THOMAS.

Coffey County.

The durum or macaroni wheat has proven to be one of the best-producing varieties of spring wheat at this station. I have sent you a circular in which you will find the rates and yields of the varieties tested at Manhattan, Fort Hays, and McPherson Experiment stations in Kansas. You will observe that at this station the durum wheat has not yielded nearly so well as the best-producing varieties of winter wheat.

If you wish to plant small grain on the land in question, I think barley or oats are a preferable crop to wheat. Corn usually succeeds better on now breaking than small grains and it would appear to me that your creek-bottom land ought to grow excellent corn; also the loose, mellow condition in which this land will be left next season will not allow the preparation of the most favorable seed-bed for planting small grains. The same objection may be urged against sowing alfalfa on this land next spring. A fairly

good seed-bed, however, may be prepared by thorough disk and harrowing in order to produce a finely pulverized, well-settled seed-bed. It would be my advice, that you grow corn or some other cultivated crop on the land next season, planting to small grains or alfalfa the succeeding year; however, it would be my preference to seed down old land or land which has been farmed to grain and corn crops for several years. Such old land would probably be more benefited by rotation with alfalfa than the sod-land which you have just broken up. If the grass-land is in a fair state of fertility, it ought to produce several crops of corn and small grains before it is necessary to again seed to grass or alfalfa.

A. M. TENNEYCK.

Red or Black-Hulled White Kafir-Corn?

We have been weighing the subject of Kafir-corn in planning our crops for the coming year. The question is, which has the better feeding-value, the red or the black-hulled white? We raise it chiefly for poultry. I have rather favored the white as it seemed the more productive, producing larger heads and somewhat larger seeds; however, I see it advocated by many in print that the red has the greater feeding-value; hence I write you for correct information. Answer through the Kansas Farmer if you choose.

MRS. F. A. HARGRAVE.

Franklin County.

The only data so far as I know on the relative feeding-value of the different varieties of Kafir-corn is that given in Bulletin 67 of the Kansas Station. In this bulletin the result of some experiments in feeding cattle on corn, red Kafir-corn and the black-hulled white Kafir-corn are given. The comparative value of the two kinds were determined by calculating all of the cost of the roughness fed to the steers, shipping, etc., and giving the Kafir-corn the credit for what remained of the price received. In the case of the red Kafir-corn, this amount was \$93.79 to pay for the 290 bushels of Kafir-corn eaten by the steers, giving a price of 32.3 cents per bushel for this variety. With the black-hulled white, \$90.83 remained to pay for the 290 bushels of the grain eaten, giving a value of 31.3 cents per bushel which is a cent less than the other lot paid for the red Kafir-corn. From this experiment it would appear that there is a slight difference in the feeding-value of the two varieties, the red having the advantage in this case.

In this same bulletin Professor Georgeson in speaking of the variety known as white Kafir-corn says that the grain of this variety is probably of a somewhat higher feeding-value than the grain of the black-hulled white. He gives no figures, however, to substantiate his belief.

G. C. WHEELER.

Prairie-Dog Poison.

Will you oblige me by publishing the formula devised and used by the Agricultural College expert to exterminate prairie-dogs? And if you know please say whether it will also destroy pocket-gophers. The gopher is a great pest here.

J. M. FOY.

Putnam County, Fla.

By the provisions of the contract with the patentee we are not permitted either to publish the formula of the prairie-dog and gopher poison in use at the Kansas Agricultural Experiment Station, or to supply the manufactured poison to persons other than residents of the State. Probably an application to David W. Staples, Crafts, Okla., will secure the information desired.

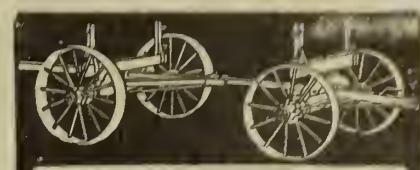
E. A. POPENOE.

Listing Ground in Winter.

Please give me information as to listing ground for corn during the months of January and February, letting the ground lay until corn-planting time and planting it without re-listing the ground. The land which I wish to use was in corn last season and is not very foul. I have been thinking of listing some as stated above and have been advised not to do so as it would cause the corn to come up poorly.

Sumner County. A SUBSCRIBER.

During the past three seasons we have carried on an experiment in preparing land in different ways for planting corn. This work was begun in 1903. Choosing a piece of corn-stubble land, the field was layed off into equal areas and the following treatment given: In the early part of March one plot was double-disked; another plot double-disked and harrowed, and a third plot was listed in furrows about 3½ feet apart, a fourth plot was plowed and

**WHAT DO YOU SAY?**

Several hundred thousand farmers say that the best investment they ever made was when they bought an

Electric Handy Wagon

Low wheels, wide tires; easy work, light draft. We'll sell you a set of the best steel wheels made for your old wagon. Spoke united with hub, guaranteed not to break nor work loose. Send for our catalogue and save money.

ELECTRIC WHEEL CO., Box 46, Quincy, Ill.

BOOK FARM TELEPHONES

How to put them up, what they cost—why they save you money; all information and valuable book free. Write J. Andres & Sons, 823 W. Water St., Milwaukee, Wis.

Wire Fence 29c

48-in. stock fence per rod only. Best high carbon coiled steel spring wire. Catalog free, tools and supplies free. Buy direct at wholesale. Write today.

MASON FENCE CO., Box 62, Leesburg, Ga.

\$7.00 Daily Av. selling Only Pump Equalizers

Make all pumps work easy. Windmills run in slightest wind. Fits all pumps. Merit sells them. Fully warranted. Exclusive territory. Write Equalizer Mfg. Co., Waseca, Minn. Dept. 13

FENCE STRONGEST MADE

on-tight. Sold to the Farmer at Wholesale Price. Fully warranted. Catalog free.

COILED SPRING FENCE CO., Box 255, Winchester, Indiana.

LAWN FENCE

Made of Steel. Lasts a lifetime. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free.

KITSELMAN BROTHERS, Box 399, Muncie, Indiana.

Page Fence

Outlasts the first users. Why? Because its horizontal bars are high-carbon, double-strength wire; its heavy cross bars are so securely woven that the fence cannot come to pieces, and the whole fabric is heavily galvanized.

PAGE WOVEN WIRE FENCE CO., Box 7864, Adrian, Mich.

KRAUSER'S LIQUID EXTRACT OF SMOKE

Made from hickory wood. Delicous flavor. Cleaner, cheaper. No smoke needed. Send for circular. E. KRAUSER & BRO., Milton, Pa.

IWAN'S POST HOLE AND WELL AUGER

Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Three times the work accomplished with an Iwan Auger than with any other. Makes hole smoothly and quickly; completes easily; is very durable. Used by U. S. Gov't. 3, 4, 5, 6, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample at special price to introduce. Agents wanted. Inquiry of dealers or direct for particulars. IWAN BROS., Dept. No. 1, Streator, Ill.

\$10.00 Sweep Feed | \$14.00 Galvanized Steel Wind Mill

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

WELL DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on stilts. With engine or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY

in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it now. It is FREE.

Austin Manufacturing Co., Chicago

\$41.00 Split Hickory

Top buggy, made to order, guaranteed 2 years; sold on 30 days Free Trial. Tell us the style vehicle you want. 100 colors, 100 styles, FREE. Send today.

The Ohio Carriage Mfg. Co., H. C. Phillips, Pres., Marion 251, Cincinnati, O.

A THRIFTY GARDEN

whether large or small, needs proper tools for seeding and cultivating. We make garden implements of all kinds, a tool for every purpose.

MATTHEWS' NEW UNIVERSAL Hand Seeders and Cultivators

singly or combined with Hoes, Plows, Rakes, Markers, etc. Over 20 styles. FREE BOOKLET giving description, prices and valuable information implied in any advertisement. Send for it now.

GARDEN TOOLS FOR EVERY PURPOSE

AMES PLOW CO., 42 MARKET ST., BOSTON, MASS.

harrowed after plowing, while the fifth plot was left as a check and received no treatment. This field was planted to corn with the lister early in May. In plot 3, which was listed in the spring, the ridges were split at planting time, then the corn was planted in the old listed furrows, as you propose in your letter.

In 1904 this experiment was repeated and again in 1905, while several additional treatments were introduced, viz., one plot was plowed deep and another shallow, while one plot was listed early and the corn planted in the furrows at planting time, while with the other listed plot the ridges were split as in previous experiments. The results of the trial for the several years are given in the following table.

Table showing comparative yields of corn on land, receiving various kinds of treatment prior to planting of crop.

Treatment of plot	1903		1904		1905		Av. for 3 yrs.	
	Grain bu.	Stover tons	Grain bu.	Stover tons	Grain bu.	Stover tons	Grain bu.	Stover tons
Double-disked and harrowed.	65.18	1.567	50.27	1.26	43.54	1.45	52.99	1.43
Double-disked.	68.61	1.814	55.12	1.50	35.43	1.29	53.05	1.53
Untreated.	64.14	1.789	51.38	1.44	38.17	2.25	51.23	1.83
Listed-ridges split at planting time.	74.28	1.55	52.37	1.43	38.34	1.67	55.00	1.55
Plowed medium deep and harrowed.	61.26	1.153	54.96	1.46	39.60	1.68	51.94	1.43
Plowed shallow and harrowed.	.....	.....	.....	.....	41.71	1.74	.....	.....
Listed-planted in old furrows.	.....	.....	.....	.....	43.31	1.30	.....	.....
All corn was planted with the lister each year.	.....	.....	.....	.....	.....	.....	.....	.....

As an average for the three seasons the method of listing early in the spring and splitting the ridges at planting time has given an increased yield of 4.77 bushels of corn per acre when compared with the land which received no treatment. The next highest yield was secured from the plots which were double-disked, and double-disked and harrowed, the average increase being 2.8 bushels per acre. Ground which was plowed early and listed at planting time gave only a slight increase of .7 bushels per acre as compared with land which received no treatment previous to planting.

The yields of stover were not in proportion to the yields of corn, the greatest yield of stover being secured from the land which was untreated, although the difference in the yields of stover, as an average for three years was very small. By comparing yields for each of the several years it will be observed that the plot which was listed early and the ridges split at planting time gave the greatest yield only in 1903. In 1904 the plot which was double-disked gave the greatest yield of any of the plots in the series, while the plowed land ranked second in yield. In 1905 the double-disked and harrowed plot produced the most corn per acre, while the plowed land ranked second. It appears, therefore, that with the different treatments the results may vary with different seasons. On the whole, however, the early cultivation with the disk or with the lister has given increased yields sufficient to pay for the extra labor. For the second trial in 1905, shallow plowing gave a slightly greater yield per acre 2.11 bushels as compared with the deep plowing, while the corn planted in the old listed furrows yielded about 5 bushels more per acre than the corn planted by splitting the ridges between the furrows made by the early listing.

It has been urged in favor of winter or early spring disking that the land warms up earlier in the spring, producing more favorable conditions for sprouting the corn in the bottom of the old lister furrow than is secured by splitting the ridges at planting time. Possibly also there is a tendency to accumulate soil-moisture in the bottom of the lister furrows, which together with the warmer soil favors a rapid germination and strong start of the corn. In connection with the experiment outlined above, soil-moisture samples have been taken from the different plots each spring and the results have been slightly in favor of the early listing treatment, although disking and early plowing have each conserved soil moisture as compared with the land which received no early cultivation. I think the plan of listing early in the spring and preparing land for corn a very good method, but whether it is best to plant in the old furrows or split the ridges at planting-time is a question. If heavy rains have not fallen and the land does not require cultivation or stirring, it may be advisable to plant in the old furrows, while under the reversed conditions, especially for late planting, it would be better to split the ridges with the lister when the corn is planted. In the

varieties which we have for sale, doubtless the Reed's Yellow Dent, Kansas Sunflower, or Legal Tender of the yellow dent varieties, will succeed well; and the Boone County White, Silver Mine and McCaulay's White Dent of the white dent varieties. Our supply of Silver Mine is nearly exhausted and we have only a small amount of Legal Tender. The McCaulay White Dent and Kansas Sunflower are medium late maturing and the Silver Mine and Legal Tender are medium early maturing.

John D. Ziller, of Hiawatha, Kans., in your county, is a corn-breeder and has several well-bred varieties. Mr. Ziller took first premiums on both yellow and white corn at the Kansas Corn Breeders' exhibit held at Manhattan January 22 to 24. The varieties were the Hiawatha Yellow Dent and the Farmers' Interest. He also took second prize on the Boone County White corn.

Although I would let you have two bushels of our corn, yet it may be that the corn grown in your locality will succeed better than seed from this station. We will have a great demand for our seed-corn and will not have enough to satisfy the demand. I believe in patronizing home industry and buying seed from local breeders if the seed is good.

For Spring Pasture.

Can you advise me as to the sowing of rye-grasses, especially Italian rye-grass? I want something that will grow quick for spring pasture. Tall oat-grass is also recommended for quick results. I have a low, rich, black loam field on which I would like to sow one or both of these grasses as I have no pasture and none I can rent handy for milch cows. Farmers' Bulletin No. 102 U. S. Department of Agriculture, recommends these grasses and states that they will make pasture in a few weeks after sowing. I have another field that I am going to sow with Bromus inermis. A. M. TENEYCK,

Chautauqua County.

For quick pasture I believe you would do better to sow some annual grass or grain. A combination of barley and oats will make spring and summer pasture and produce much more grazing than you will be able to secure from rye-grass or tall oat-grass. Both of the last-named grasses are perennials and although they start more rapidly than Bromus inermis and English blue-grass, yet we can not consider these grasses equal to the last-named grasses, either for pasture or meadow.

We have been growing the several grasses at this station for a number of years and find that the rye-grasses, both the Italian and perennial rye-grasses, are practically worthless as compared with English blue-grass and Bromus inermis. The tall oat-grass produces better than the rye-grasses and may be of value as a combination with other grasses for a meadow or pasture, but it would not be a good grass to sow alone since it does not produce a sod.

If you desire to sow the rye grasses or fall oat-grass, you should sow about 30 to 40 pounds of the rye-grasses and 20 to 30 pounds of the fall oat-grass seed per acre. When two or more varieties of grasses are seeded together it is usual to sow at a slightly increased

rate per acre, more than the actual aliquot part of the regular seeding would require.

If you use the barley and oats for early pasture, sow at the rate of about a bushel of barley and a bushel and a half of oats per acre. For late summer and fall pasture, you could, a little later in the season, sow cow-peas, sorghum or corn, or a combination of corn and cow-peas or sorghum and cow-peas. At this station we found that corn and cow-peas sown at the rate of 3 or 4 pecks of cow-peas and $\frac{1}{2}$ bushel of corn per acre gave a large amount of excellent pasture for cattle in the late summer and fall. Of course to make the most out of annual pastures it is well to have different fields in order that you may turn the cattle from one field to another, allowing them to clean up one field before they are turned into the new pasture. When stock are turned into a large field of corn and cow-peas or sowed corn and sorghum they will destroy a considerable part of the forage by trampling it down.

In order to have a perennial pasture for next season you could sow a combination of English blue-grass and orchard-grass with a little clover, sowing 10 pounds each of the orchard-grass and English blue-grass with 5 or 6 pounds of Bromus inermis and 2 or 3 pounds of clover per acre. If you succeed in getting a good start this spring, the new seeding will furnish considerable pasture next fall. Care should be taken, however, not to pasture too closely as the young grasses may be easily injured by too close grazing or too early pasturing the first season after sowing.

It is likely that the Bromus inermis sown alone will make a good pasture, but I would recommend at least to include a little clover with it, and in your part of the State it is better to sow a considerable proportion of orchard-grass and English blue-grass. The last-named grasses may produce a quicker growth and more pasture the first year or two, but the Bromus inermis will gradually thicken up, while the other grasses may die out and become less productive. A combination of grasses with clover makes a more permanent and more productive pasture than any single grass.

I have mailed to you copies of press bulletins Nos. 125 and 129, giving information regarding the seeding of these grasses, and refer you to seedsmen whose advertisements appear in this paper.

A. M. TENEYCK.

Alfalfa Bacteria.

As spring approaches, thoughts of "alfalfa sowing" are naturally suggested. I read all I find in two agricultural papers—in fact everything that falls into my hands on the subject.

One writer says: "It is not a fertilizer," yet in the same article says, "If the soil is properly impregnated with the alfalfa bacteria so that nodules appear upon the roots of the plants, the alfalfa will certainly improve the soil by imparting nitrogen, gathered from the air." Adding nitrogen to the soil is certainly adding fertility.

We are advised to procure soil from fields where alfalfa has been grown and scatter the soil in the field where we propose to sow alfalfa. There is need of care in this; soil taken indiscriminately from fields may be as destitute of bacteria as the field you desire to sow. The fact that alfalfa has been grown in a field does not necessarily prove the presence of bacteria.

I conclude that if I scatter soil about my field the ferment will spread over the entire field—"A little leaven will leaven the whole lump." Am I correct? It is a good deal of an undertaking to ship or haul in from any distance soil enough to cover, even sparingly, a five- or ten-acre field. But if I am correct in the above, it relieves the situation amazingly.

I have seen it stated that bur clover carries with it the property of introducing the proper bacteria in the soil, and if sown with alfalfa it will produce the desired result. Why not adopt this plan and in this way escape these grafters in soil and nitro-culture done up in cotton? I have no doubt but this latter, in the hands of Dr. Moore of the U. S. Department of Agriculture, is legitimate and fairly safe; but he is not the only one selling nitro-culture preparations. You are aware that the U. S. Department of Agriculture has stated that nitro-culture treatments may not always prove successful.

If I am correct—"A little leaven will leaven the whole lump," a small percentage of bur clover added to the alfalfa seed, say $\frac{1}{4}$ bur clover, would be all that is needed. R. W. SCOTT.

Geary County.

I have not heard of any farmer who

\$16.00 AN ACRE
in Western Canada

160 ACRE FARMS IN WESTERN CANADA FREE

is the amount many farmers will realize from their wheat crop this year.

25 Bushels to the Acre will be the Average Yield of Wheat

The land that this was grown on cost many of the farmers absolutely nothing, while those who wish to add to the 160 acres the Government grants, can buy land adjoining at from \$6 to \$10 an acre.

Climate splendid, schools convenient, railways close at hand, taxes low. Send for pamphlet "20th Century Canada" and full particulars regarding rate, etc., to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent.

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.

Mention this paper.

The Farmer's Wife

And the Telephone

When considering the advantages of a telephone on the farm, and whether or not to buy one, don't forget the wife. Of course the telephone is a "time-saver" for the farmer, it removes the necessity for so many trips to town, and gives him more time for work, but above all don't overlook the companionship it will afford the wife during the long day when the men-folks are away. It will be a protector to her and a messenger if occasion compels her to call for aid or assistance in a hurry. It will relieve the dry monotony of many a dreary day and drive lonesomeness away. The story is told of a line inspector, out in Illinois, who one day found a woman rocking and knitting, with the receiver of her telephone tied onto her head, so that she might hear all the conversation that passed over the line. That poor woman was not "nippy," she was just lonesome. Hundreds of farmers' wives know what it means to be lonesome—to yearn for companionship. Think what a relief the telephone will be to your wife, what a sense of security it will give her just to feel that she has the entire neighborhood right at her elbow when she wants them.

Stromberg-Carlson Telephones

are best for the farm, because they are always in order. They are made right, especially for such service, and they stay right. You can buy cheaper telephones, but they will cost you more in the end. They will be out of fix most of the time and will require constant attention to keep them "working" at all. To make your farm line both practical and profitable, don't experiment with cheap telephones. Buy only the best. We would like to help you to decide which is best; to do that, let us send you our new book, "How the Telephone Helps the Farmer," in which we illustrate and describe the process of making a farm telephone from beginning to finish, taking up particularly the most important or essential parts and showing how we make them and how the cheap fellows make theirs. This will be an object lesson to you that may save you a good many dollars and no little disappointment. It tells how to interest your neighbors in building a line, and will furnish valuable information you cannot afford to be without. It's free—write for it today. A postal will do; just say, "Send me 12-N," and it will come by return mail.

STROMBERG-CARLSON TEL. MFG. CO.
Rochester, N. Y. **Chicago, Ill.**

Eureka Boiler
or Steam Feed Cooker
Saves half your corn or other feed. Saves labor in feeding. It will steam moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information.
John Deere Plow Co
Denver Kansas City

CAMPBELL SYSTEM FARMING ASSOCIATION

Membership \$5.00. Organized to educate farmers to use the Campbell System of soil culture. Dry Farming Magazine, edited by Mr. Campbell, \$1.00 per year, including Campbell's Manual. Send ten cents for sample copy today. Cash discount on Campbell machinery to members only.

The Campbell System Farming Association,
1715 California St. Denver, Colorado

has become wealthy by selling soil infected with bacteria, from old alfalfa fields. The college has offered to supply limited quantities of soil at a little more than cost of handling the soil. We found it necessary to charge for the soil, otherwise the demand would be greater than we could supply. It is not necessary to make a great outlay in introducing bacteria into new land by means of spreading the infected soil from old alfalfa fields. My recommendation is that only an acre or so of the new land be treated the first season. This will not require more than 300 or 400 pounds of soil, if the soil is finely pulverized and evenly distributed, which may be done by sowing broadcast by hand. A year or so after this inoculation, some of the surface soil from the acre in question may be used to spread over the balance of the field. In this way for a few dollars a farmer in almost any part of Kansas may inoculate the soil of a large area of land with the alfalfa bacteria.

It may be true that land where alfalfa is growing may not always contain a supply of the bacteria which are associated with the growing of this crop. It is usually a fact, however, that where alfalfa has grown successfully for any length of time—three or four years—the bacteria are almost surely present. If they were not the crop would not continue to thrive for that length of time, unless by heavy manuring or special fertilization. However, the presence of the bacteria may be readily shown by examining the roots of the alfalfa plants. On the small fibrous roots near the surface, small warts or tubercles will be found if the bacteria are present. It is true, as you have said that "a little leaven will leaven the whole lump" and a very small supply of bacteria spread over new land will in a year or so inoculate the roots of a large portion of the alfalfa plants growing on the field.

As to the use of nitro-culture preparations in treating the seed, the results are very variable. With the live culture and by faithfully following directions a careful farmer may infect the seed and thus inoculate the soil with the required bacteria, but failure of this method is more apt to result than by the use of the infected soil. Also, I would not recommend to inoculate seed for a large area but only for an acre or two, when in a year or so the balance of the area could be inoculated by using some of the infected soil from the land on which the inoculated seed was sown.

It may be true that the bacteria which live on the roots of bur clover may also work on the roots of alfalfa plants, but I do not understand why the inoculation of the soil should result sooner by sowing bur clover than by sowing alfalfa, provided the seed which is sown has not been treated nitro-culture preparations. I think your plan of sowing bur clover seed with the alfalfa would have little effect in introducing the alfalfa bacteria into new land. It seems, however, that it would not always be necessary to mix bur clover seed with alfalfa. The complaint has come from several farmers that the alfalfa seed which they purchased was adulterated with bur clover seed, and if this is very general it will not be necessary, as you see, to add more bur clover seed. Perhaps the seedsmen have your ideas on this subject and feel that they are only benefiting the farmer by adulterating the alfalfa with the bur clover seed.

A. M. TENEYCK.

Alfalfa in Drill-Rows.

My place is in the central western part of Wichita County, Kansas. I have about 200 acres of creek bottom on the Beaver, that varies from 12 to 14 feet to water, which I wish to put into alfalfa eventually. The main things to contend with are prairie-dogs, gophers, and salt-grass, also dry seasons; there are several fields here of one-quarter and one-half stands. As the seed is expensive, I wish your opinion on the following plan as a source for seed-production: After disposing of the foes, prepare a good seed-bed and plant in rows, then cultivate shallow 3 or more times per season and preserve dust mulch with harrow; then, when ready—say three or five years—drill in space between rows after the bacteria are present and make a solid tract. My idea would be to have the rows about 3 feet apart and use a Towers knife-cultivator (I have one) such as is used for corn in Illinois. This gives a level cultivation and a perfect mulch. My reason for thinking of such an experiment was this: I purchased the place and found it very foul with weeds. It occurred to me that this method would secure perfect inoculation of soil with bacteria (which are present in small numbers) and irradi-

ate any and all weeds and salt-grass, thus practically insuring a perfect stand when ready to seed solid, or fill in, also would be a seed-supply for the whole tract. I thought of trying a plot 10 or 12 acres to start with. I have had previous experience with alfalfa and believe there is no question about its success here. Having no information of such an experiment having been made, I should like your opinion very much, also any kindness in way of advice or suggestions relative to the matter.

C. S. CHRISTOPHER.
Wichita County.

The factors with which you have to contend are "strenuous," but if you can get rid of the prairie-dogs and gophers I think you may successfully contend with salt-grass and dry seasons. Your method of planting alfalfa in rows is a new one for this State, although I have heard it spoken of before. There is no doubt but that by planting alfalfa in rows and cultivating it you will give the alfalfa plants a much more favorable condition for starting and making a strong root-growth than will usually be the case by seeding broadcast or in close drills, as is the usual practice. It is likely that in your section of the State, alfalfa planted in rows 2 to 3 feet apart and cultivated will yield more per acre than if sown broadcast or in close drills and given little or no cultivation. The cultivation will conserve the soil-moisture and produce a larger growth from the land than would otherwise be the case. As to securing the inoculation of the soil with the alfalfa bacteria, I think this can readily be accomplished by the broadcasting or close drilling method of seeding, simply by carefully spreading over the new land infected soil secured from some old alfalfa field. Two hundred or 300 pounds of infected soil, finely pulverized and evenly distributed, will usually result in a good inoculation in a year or two.

When you wish to seed down the whole land, you may find it difficult to secure a stand of alfalfa between the cultivated rows after the alfalfa in the rows has become well established, since the plants will likely sap the ground of moisture and perhaps shade the land so much as to destroy the young alfalfa plants which may start; however the results can only be ascertained by making a test. Perhaps you will not desire to seed down the whole land after you have tested the cultivation method.

I hope you will undertake this experiment and shall be pleased if you will report results.

A. M. TENEYCK.

Yellow Alfalfa—Seed-Corn.

I own a farm in Kansas near Courtland, Republic County, which I bought eighteen months ago. I have had it rented till now, but intend to make my home on it from now on. It is a good quarter section, but like most land around there has been "corned" to death for twenty-five years. I have seen some of your articles and would like to be on your mailing list when I get home. The reason I write now is to ask a favor of you. Would you kindly give me the address of some reliable man who has a few bushels of soybeans for sale? I want the beans for seed. I am going to try the crop on about five acres this spring. I intend to sow broadcast and cut for fodder shortly after the plants start to form the first pods. Is that a good way? I am not so particular to get the fodder as to enrich the soil, as I have lots of alfalfa. Please tell me what you think best.

I had my renter put in an additional 10 acres of alfalfa this last spring, in May. The soil was fall-plowed, and he harrowed it and then seeded it, then harrowed it again. It came up in splendid shape, and grew well until it had four leaves, then stopped. We had much rain last summer but the alfalfa turned yellow and just stood that way, not growing any more except a few patches here and there. I took a trip home about August and examined the ground and found that it had been fall-plowed when the weeds were very high, and they formed a regular "mulch" 4 or 5 inches below the surface. When the alfalfa roots reached the mulch they either got heated or for some other cause did not penetrate to the subsoil. I have only a very poor stand here. Would it not be all right to sow seed this spring and disk it? I would like to have that particular field in alfalfa for a while. Have you any good seed-corn for sale? I would like to get some from you. Do you know any one that has large, white, seed-corn for sale?

Alaska.

CHAS. ANDREN.

GET THE BEST—TOWERS' SURFACE CULTIVATORS
for corn, kafir-corn, cotton, tobacco, sorghum,
potatoes, beets and other vegetables.
THREE SIZES: for two rows or one row—three
horses, two horses or one horse. Kill the weeds;
nurture the roots of growing plants; preserve mois-
ture; cause full filling of grain; Increase yield
ten per cent and up. **FREE** Treatise on Surface Cultivation.
Introductory prices where we have no agents.
J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.

From Factory to Farm

14 in. Steel Beam Plow, Double Share

\$8.40

12-in. \$7.40
16-in. \$8.95
18-in. \$9.75
Sulky Plow \$25
Gang Plow \$39
1000 other arti-
cles, Big Catalog
Free. Special
Catalogues of
Buggies, Harness,
Steel Ranges, Best Walking Cultivator, 4 shovel, \$12.00. Best Walking Cultivator, 4 shovel and Eagle
Claws, \$15.25. Improved Riding Cultivator, 4 shovel, \$19.00. Improved Riding Disc Cultivator, 6 Disc,
\$25.00. Corn Planter, complete, 80 rods wire, \$27.75. Address

HAGGOOD PLOW CO.,

524 Front St., ALTON, ILL.
(Only plow factory in the United States selling direct to farmers at wholesale prices.)

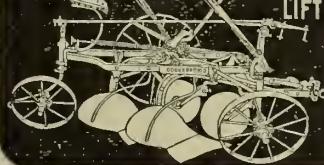
**NO AGENTS
NO MIDDLEMEN**

See what it means.
64-Tooth Lever Harrow \$8.15
96-Tooth Lever \$12.45
14-in. Imp. Lister \$17.75
14-in. Sulky
Lester \$31.65
8-ft. Rake \$16.00
Sewing Machine \$9.00
Best Sewing Machine
Gt. equal to any \$50
mower \$17.50
Steel Range with Reg. \$19.70
Fine Top Buggy \$33.50
12-16 Disc Harrow \$17.00

Before Buying a Plow

Send for the book on **Money Making Methods in Soil Cultivation**. It is a complete guide as to how to prepare your acres to get bigger crops and what style of implements to use under certain conditions of soil. Then when you have learned what would be the best plow for **you** to use, INVESTIGATE THE

NEW ECLIPSE SPRING LOCK HIGH FOOT LIFT



Fuller & Johnson Line

Walking Plows, Sulky and Gang Plows, Harrows, Planters, Cultivators, Transplanter, Manure Loader, etc. All styles in these machines and all possessing the Fuller & Johnson Standard Quality. Plows with extra hardened highly polished steel mould boards that scour in any soil. Spring lock to steady plow in furrow. High and easy foot lift, strong, durable wheels. Get the book first and then decide. Address

FULLER & JOHNSON MFG. CO.
119 Dickinson St., Madison, Wis.

SOIL CULTURE BOOK FREE
MONEY MAKING METHODS IN SOIL CULTIVATION

Correct Fence Construction

CORRECT construction is just as important in fence as it is in a house, a bridge, or a wagon. With faulty construction, the best and the heaviest materials avail you nothing. Advance Fence is so constructed as to utilize *all* the strength of the material used. The stay wire is continuous, without an end for many rods. Manufacturers who use cut stays waste about half the strength of the wire. That's bad construction.

Galvanizing. We have recently made special arrangements with a large manufacturer of wire to have our representative always on the ground to see to the proper galvanizing of our wire and to reject all wire not properly galvanized. This insures the long life of Advance Fence.

We sell direct from factory and thereby cut out all unnecessary handling and profits of go-betweens. This makes quite a saving.

Thirty Days Free Trial. Place your order with us for what fence you need. After thirty days, if it does not suit you, return it to us at our expense and get your money back. That's fair.

We Prepay Freight and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices

ADVANCE FENCE CO.
3772 Old Street, Peoria, Ill.

ADVANCE

Let Me Quote You a Price on a First-Class Fanning Mill

How many dollars could you save if you owned a genuine Chatham Fanning Mill?

Think for a moment what it will do.

It will grade grain so you can get a fancy price for the best.

It will take weed seed, chaff and withered kernels out of seed grain.

It will separate one kind of grain from another.

It will remove oats from wheat.

It will clean Corn, Rye, Barley, Wheat, Oats, Timothy, Clover, Millet, Flax, Rice, Peas, Beans, Kafir Corn, Potatoes, Broon Corn, Alfalfa, Grass Seed, Cotton Seed, Atsike, Blue Grass, Red Top, Buckwheat, Itungarlin, Orchard Grass, Rape, Rye Grass and everything of this kind.

And in any one of these processes a Chatham Fanning Mill will save its entire cost in short order.

For the fanning minkes every bushel of grain you raise worth more money.

You don't sow weeds if you use a Chatham Fanning Mill.

You don't get "second price" for grain if it has been lanned.

And to prove our claims to you—to convince you that Chatham Fanning Mills are the best made and will do what we say, we are willing to let you try one 30 days **FREE**.

If you wish,

Send today for our liberal proposition. It will surprise and please you.

For we sell direct to you and ship from one of our 20 big branch warehouses in leading cities. This means prompt shipments and quick deliveries.

And you get a Fanning Mill made by a factory that makes a specialty of high-grade mills.

You buy at a bargain price.

For we make our own mills in one of the biggest factories in the world.

Our ample capital enables us to buy supplies in immense quantities at low prices.

We turn out hundreds of Fanning Mills.

Our workmen are skilled. They have had long experience. They know just what to use and how to use it.

Consequently we are able to give you bigger value for your money than you can get anywhere else.

The Chatham

Name Stands for Quality.

And you can get no such Fanning Mills as ours from ordinary mail order or catalog houses.

You cannot buy mills as good from dealers or at general stores.

Over 200,000 Chatham Mills are in use. We have made them for sixty years. Today they are better than ever—absolutely modern and up-to-date.

Users everywhere will tell you our mills are the best.

But send at once for the rest of the story and our liberal selling terms.

Ask for our little book "How to Make Dollars Out of Wind." It tells how a Chatham Fanning Mill will put dollars in your pocket.

A post-card with your name and address, mailed today, gets it.

The Manson Campbell Co. (Limited)

Makers of Chatham Fanning Mills, Incubators and Brooders

319 Wesson Avenue, DETROIT, MICH.



Stock Interests**PURE-BRED STOCK SALES.**

Dates claimed only for sales which are advertised or are to be advertised in this paper.

February 15-17, 1906—Third Annual Sale of the Improved Stock Breeders Association of the Wheat Belt at Caldwell, Kans., Chas. M. Johnston, Sec'y.

Feb. 19, 1906—Poland-China bred sows, at Ottawa, Kans., W. N. Messick & Son, Piedmont, Kans.

Feb. 20, 1906—M. S. Babcock, Nortonville, Kans., Poland-Chinas.

February 21-23, 1906—Percherons, Shorthorns, Herefords at Wichita, Kans., J. C. Robison, Manager, Townska, Kans.

Feb. 22, 1906—Shorthorns, by Plainville Shorthorn Breeders' Association, N. F. Shaw, Plainville, Kans.

Feb. 22, 1906—Poland-China bred sows, Boilin & Aaron, Leavenworth, Kans.

March 20-21-22, 1906—Combination sale of Shorthorns, R. A. Ford, Manager, Lawson, Mo.

Feb. 23-24, 1906—Manhattan, Kans., Percherons, Henry & Son of Wakefield, Kans.

Feb. 24, 1906—Poland-China bred sows, H. E. Lunt, Manager.

Feb. 24, 1906—Poland-Chinas, at Wichita, Kans.

February 28, 1906—Duroc-Jerseys by J. F. Staadt, Ottawa, Kans.

February 28 and March 1, 1906—C. A. Tannard, Gudger & Simpson, Kansas City, Mo. Herffords.

March 13, 1906—40 Poland-Chinas, by D. W. and 45 Shorthorns, C. S. Nevius, Chiles, Ia.

March 13, 1906—Shorthorns and Poland-Chinas by C. S. Nevius, Chiles, Kans.

March 20-22, 1906—Combination sales of Shorthorns, Herefords, Aberdeen-Angus and Herefords at Kansas City, R. A. Ford, Manager, Lawson, Mo.

April 3, 1906—James Stock Farm, Willard, Kans., trotting bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders' Association at Fredonia, Kans., H. E. Bachelder, Manager.

May 16, 1906—Geo. Allen, Omaha, Neb., Shorthorns.

KANSAS IMPROVED STOCK-BREEDERS' ASSOCIATION SIXTEENTH ANNUAL MEETING.

(Concluded.)

The Modern Hog.**DISCUSSION.**

Mr. McGuire: I rise to endorse the paper. I think it has covered every point possible in the hog line. Of course, he has left out the Tamworth, which possibly you alluded to. The Tamworths have their places among other hogs. They are called the "bacon" hog, and I suppose they are all right. But one great point with the hog is the first two months. If I can get a hog through successfully for the first two months then I have no fear after that; I can always make a good growth. For the first ten days I always feed my sows very carefully as this is the most delicate point. After the first ten days I can feed my sows all I want to of almost anything I can feed them.

A Member: I feel that Mr. Berry's paper has been a lesson to all of us, even though we consider that we are pretty near perfection in the way of raising pigs. I heartily endorse the paper so far as I understand it.

A Member: I do not believe breeders are in the habit of getting their feet in the trough very often, but I want to commend this paper as in my judgment being a good one. The ultimate end of the hog is the block, and the question is, how cheap, what is the most profitable time to get him there, and in what condition? He speaks of putting pigs off at 6 and 7 months weighing 250 pounds. Of course, a breeder has to feed different from what a man does that is feeding for the block. That is to be taken into consideration.

Mr. Berry: There are breeders here who are older than I, who have had more experience than I, but my observation leads me to believe that feeding has much to do with the maturing of the hog with type and quality as breeding. A man can feed for bone and muscle as well as breed for it. We hear a good deal in the discussion these days about heavy-boned hog or light-boned and which breed. I believe that feeding had more to do with development of the bone and ability of the hog to stand up than breeding. The fact is that the muscles and tendons have as much to do with holding the animal up as bone does. The quality of the bone has as much to do with it as the size of the bone. . . . Experiment stations have made feeding tests, and I think that those experiments agree on the fact as stated in the paper, that young animals gain more in proportion to the number of pounds of feed consumed than do older animals, and in the first part of the feeding test they gained faster than in the latter part. The type of animal and its advantage have as much to do with this, I might say, as do other conditions. The best gains I have ever secured in pigs or hogs were between the ages of 5 to 10 months. If they are well handled and well fed, after that they do not gain so rapidly in proportion to the amount of food consumed. I want to say one thing regarding alfalfa. There seems to be an impression gone out

and believed by a great many hog men that they can raise pigs on alfalfa and do very well. I do not believe that a breeder can get best results by feeding his brood sows alfalfa alone. To be sure they will get along until time of farrowing in good health and farrow apparently a good litter of pigs, but I have secured better results by having my sows in better flesh at farrowing time, as you have that much in reserve for feeding the pigs later.

Mr. Harrington: I do not want Mr. Maguire to tell on Gov. Hoard, because he is from Wisconsin. I think if you will look up Gov. Hoard's papers you will see that he fed them on alfalfa and drink, that drink consisting simply of skim milk, that is all.

Mr. Potter: I never yet saw a hog thrive on alfalfa alone, and I have seen alfalfa hogs by the thousands. They remind me of the average vegetarian. You know how he looks. Now, I understand Governor Glick has a hog talk. We will hear more about it when he tells us about it.

Governor Glick: If a man succeeds in anything after study and investigation it ought to be worth something. I commenced in '68 feeding hogs; not only thoroughbred hogs to sell to breeders, but stock hogs. I have raised an average of from 300 to 400 hogs a year, and I have some good ones. Bought a couple of sows from Queen Victoria, and three sows and a boar from Russell Swanwick's herd, and several good ones in Canada. I found I had a great deal of trouble wasting feed. In having all the hogs together some would be stronger than others, and they would commence at one end of a long trough and go the whole length, thinking they could get more feed, and the result was that small hogs did not gain as fast as they ought to. They were deprived of their full share of feed. I tried all kinds of troughs, got advice and assistance from gentlemen in relation to troughs, and the general consensus of opinion was that the "V" shaped trough was about the only successful trough that a farmer could have and use. From the waste of feed and the manner in which the hogs acted I came to the conclusion that that was not the right kind of a trough, and after studying and investigating, I thought out a pig-trough like this (holding up a small model). A 14-foot trough will feed 48 pigs. You can not get a 28-foot "V" trough in which you can feed slop to 48 pigs satisfactorily. This trough gives each pig its place. He can not get his feet into the trough; he doesn't waste any of his feed. The big hogs can not root the little pigs away from the trough. Each gets its full share as long as there is any feed in the trough. You save a large amount of feed by the use of that kind of trough and your pigs will do a great deal better. They will grow more uniform because they get their equal and full share of feed. This trough, you will see, has a center in it. The pig gets in here; he can not get his feet in the trough. He just stands there and eats his share of the slop, and he gets his share and all he wants if it is furnished him. I finally made two troughs of that kind, one 14 feet and one 16 feet long. Another advantage of this trough I found was this: Your having two troughs, the small pigs within a day or two would learn just where they could go and get their feed in peace without being rooted away. The other hogs that could not use this small place would immediately run to the other trough. I found that my pigs were a great deal more uniform in their growth, there was no waste of feed, and for that reason I do not believe it took nearly as much feed to make the pigs. Now that trough is not expensive. The bottom board 1 inch and 5 inches wide, sides beveled up and ordinary 6-inch fencing board used for the sides and upright pieces. Those two troughs lasted me nearly twenty years. I never had to rebuild them after I found just how I wanted them made.

A Member: How did you clean it out?

Governor Glick: It never gets dirty; the pigs keep their feet out. You can run it till spring without getting any dirt in it that you think it necessary to clean out, but you can clean it out.

It was stated by some that they had seen similar devices advertised, for which a handsome royalty was charged. The Governor said that he had used this for 30 years, and that some men may have undertaken to get a patent on it.

A Member: I would like to have the dimensions published in the Kansas Farmer.

A Member: Isn't a 6-inch board high for a pig to drink over?

Governor Glick: I never found any trouble from that.

A Member: I make a trough similar to that. I don't know how the Governor makes them last twenty years. The hogs gnaw the boards.

A Member: If I was going to make any improvement on that trough I would like the bottom part 6 inches wide and the top 12 inches, so you would have bevel on each side.

Professor Kinzer: I had not expected to say anything on this subject until a few minutes ago I was asked to make a few remarks on the subject of hogs. We are feeding a bunch of hogs at the station now in an experiment, in which one lot is being fed on corn alone—corn-chop, fed in the form of swill; another lot on corn and alfalfa, and the alfalfa is fed whole. We make a little rack to feed this in, the same way we feed calves; and the other lot is fed on corn and tankage. The idea in this experiment is to compare tankage with other feeds. Perhaps we have no feed to-day that is more talked of than tankage and meat meal, and a great many stations have reported large gains from the use of tankage in comparison with corn as a hog feed, and we have been able in this experiment to make almost twice the amount of pounds gain with tankage as compared with corn alone. Of course it is of great interest to the packers to have this product fed, as it was formerly waste, and if it can be turned into valuable feed it will mean dollars to them. I want to endorse what Mr. Berry stated in his paper about feeding hogs. I think one fault a great many find is in having their sows too fat at farrowing time. The trouble is in not having the right kind of fat on them. If they are fed altogether on corn there is danger of getting too fat; give them some other kind of feed and lots of range and exercise. We try to keep plenty of green feed for our pigs during summer. Being pressed for room on the farm we find rape to be about as satisfactory as anything.

A Member: Let me ask a question. Is it possible for a hog that has good body and that is thriving and apparently in good healthy condition to be affected by tuberculosis?

Professor Kinzer: Yes, sir; I think so; find it all through the body. Usually the lungs affected more or less. That is where they look for it.

A Member: Have you ever known a hog that would eat rape if he got a chance to eat grass?

Professor Kinzer: I would rather have grass or alfalfa if we can get it. I should prefer alfalfa or blue-grass and clover if you can get it.

A Member: Since we have been using alfalfa for pasture for pigs we have been troubled more with worms than ever before.

Professor Kinzer: I have never heard it attributed to that. Perhaps Mr. Berry can answer that.

Mr. Kirkpatrick: I would like to ask the professor for indications of tuberculosis in the hog; how would you know without veterinary inspection or killing?

Professor Kinzer: I do not believe you can tell it with outward examination. I do not think you could be certain of it.

A Member: Do hogs pretty nearly always cough on account of having worms?

Professor Kinzer: I think they do.

A Member: I would like to ask, if this tankage is made according to the process they claim, if it is possible for it to have tuberculosis in germs?

Professor Kinzer: I do not think it is possible to have any tuberculosis in it. It is heated to a high temperature. I do not think it is possible to have it come that way.

A Member: I have had a little experience in feeding tankage and I find it obviates the difficulty which some speak of here regarding worms. Whenever your hogs become constipated they are liable to become wormy. Whenever you find the droppings hard and black then is the time to commence feeding tankage. You will notice results at once. It keeps their bowels open, and as long as hogs' bowels are open and in good healthy condition they are not liable to contract disease.

A Member: I would like to ask one question, and before asking it would like to say that seven years ago I lost a lot of hogs by cholera. I now make a practice of feeding my hogs with salt the same as cows and horses, and I have not lost any. I want to ask you

SLOAN'S LINIMENT
CURES 50c. and \$1.00.
Swine Disease and Hog Cholera
Send for Circular with Directions.
Dr. EARL S. SLOAN, 615 Albany St., Boston, Mass.

THE HAPPY HOG AT DIPPING TIME
Is happy because he is being FREED from LICE that torture and torment. August, September October, are best months to dip hogs to kill lice. DIPOLENE, the best Hog Dip, works quickly and thoroughly. It KILLS HOG LICE, destroys all disease germs, prevents your hogs healthy and growing. Every hog-raiser needs it. DIPOLENE is easy to use; the cheapest hog insurance you can buy. Write for booklet and enough dip to make a gallon, FREE.
MARSHALL OIL CO., Box 13, Marshalltown, Iowa.

Ring-Bone

There is no case so old or bad that we will not guarantee
Fleming's Spavin and Ringbone Paste
to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Spavin and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of
Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make a right beginning by sending for this book.

FLEMING BROS., Chemists, 212 Union Stock Yards, Chicago, Ill.

KENDALL'S SPAVIN CURE

It Cures It Lasts

Used 5 Years—Best for Man and Beast. Grand Isle, Vt., March 20, 1906.

Dr. B. J. Kendall Co., Dear Sirs—I have used Kendall's Spavin Cure for both horses and family for the pastive years. It is the best liniment I have ever used. I would not be without it.

Yours truly, M. M. Socia.

Everybody who ever used it calls Kendall's Spav-

In Cure The Great Horse Remedy

Surest cure for Spavin, Ringbone, Curb, Splint and all Lamenesses. Price \$1.00 for 35. Greatest liniment known for family use. All druggists sell it. Accept no substitute. The great book, "A Treatise on the Horse," free from drugists or

Dr. B. J. KENDALL CO., Enosburg Falls, Vt.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when milky. Sent prepaid for the price, \$1.

Address orders to **W. O. THURSTON, Elmdale, Kansas.**

HOG CHOLERA

Free remedy for 30 days. I am going to prove to the hog raiser of this country that I am offering him the remedy he has been looking for. Send me your name and I will send you a regular

\$1.00 package for trial
W. E. VINCENT, Prop. Elm Lawn Stock Farm, Hutchinson, Kans.

Kimball's Dairy Farmer**Three Months for 10c**

Jam full of sensible cow talk—short, boiled-down, right-to-the-point—good, practical stuff for you men who own the cows. Semi-monthly. You'll like it. Subscribe now.

E. R. SHOEMAKER, Editor and Mgr., Box 185, Waterloo, Iowa.

THE KANSAS FARMER

if you had any experience feeding hogs salt.

Professor Kinzer: We aim to keep salt before our hogs all the time, and when we can get wood-ashes we keep ashes and sulphur in little boxes in the pens.

A Member: We have a feeder with men who picks up culls around the country, and then he straightens them out with lime, carbolic acid and salt, which is in the pen all the time, especially the salt, sulphur and charcoal. But inside of a few weeks he has those hogs coming along fine. It is not an exception with him. It is right along. When a man has got a lot of hogs that are not doing well he buys them up. He is not afraid of hog cholera.

Mr. Hazelton: I was introduced and made a brief talk; I did not expect to say anything to you this afternoon. I came here more to hear what you gentlemen had to say in regard to the hog than to talk. I am naturally very much interested in the Kansas hog, as I am in Kansas horses and Kansas cattle. We have at Kansas City what we believe to be one of the greatest live-stock shows in the country, and Kansas cattle-breeders and Kansas horse-breeders have done perhaps more than those of any other state to make this a great live-stock show. I am met frequently with the question: Why do you not have the great American hog represented in the live-stock show? Well, I have been forced to say that the reason we have not had a good swine show at Kansas City is because the swine-breeders themselves have not shown sufficient interest in the matter. There are various reasons for this, and we feel that to have a thoroughly rounded, symmetrical, live-stock show it would be necessary to have the different breeds of swine which are now found all over the country. Last year some of the swine-breeders insisted on showing, and we gave them space, and they came there and showed their hogs. The directors of the American Royal Live Stock show have issued an invitation to the swine-breeders to come into the show this year, because they feel that it is a lopsided institution, great as it is, without the hog in it.

So far there has nothing tangible been done in regard to the horse-show outside of talking by a number of breeders in Iowa, Illinois and Missouri, and some from Kansas have talked the matter up, and some of the breeders' association have, and I am satisfied within the next two or three months definite action will be taken looking toward a swine show in Kansas City in October. Now, I do not know that there is anything that this body could do as a body further than to encourage us along the line of having a hog show there. As you know, the Kansas hog is a very important factor in the live-stock industry of Kansas City. I was reminded this afternoon, in speaking of the matter, that something over 50 per cent of the hogs which we receive at Kansas City are from the State of Kansas. There has been some objection raised to showing hogs at Kansas City on the ground that it is dangerous. Now, I appreciate the fact that it is dangerous to take show-hogs anywhere off the farm. A man takes risk in taking his hogs to any public show. We believe that under the system that has been used at Kansas City the last few years there would not be any more danger than showing them in Sedalia, Springfield, etc. So I want to extend an invitation to the Kansas breeders of swine to meet with us this year. Bring your herds over there, if we have a hog show, which I am satisfied we will have, and win the money if you can, and I think you can.

Governor Glick: Now, with the cattle-men their association puts up the money themselves for premiums. How would it be with premiums for hogs?

Mr. Hazelton: They will put up as much money as the hog men do. As an inducement to the hog breeders to come there and make a full rounded, symmetrical live-stock show, we will agree to meet them half way in the matter of premium money. The same proposition is open to any breed of sheep or any breed of swine.

Mr. Kirkpatrick: I have had a little experience in this line in Kansas City. I am glad to notice, however, that the American Royal people are disposed to encourage exhibits of hogs among their cattle at Kansas City. I am not prepared to say to-day that a successful show of breeding stock could be held in Kansas City. As many of you are aware, we did undertake that, and we did have a very creditable show of hogs in Kansas City—breeding hogs,

but nevertheless we had some very bad results, such as those who suffered will never forget; and while every precaution was used in examining the hogs and in the use of recognized successful disinfectants, which were used continually, owing to the unfortunate arrangements for switching facilities at Kansas City, several of the ears of hogs that were brought into Kansas City for exhibition were exposed to the tracks that carried diseased hogs out of the yards in Kansas City, which we now know to be the prime cause, the only cause, for the spread of cholera which followed the exhibition in that city three years ago. It proved very disastrous. Notwithstanding the great risk at Kansas City, such circumstances need not occur, and could be remedied, if the hog men would come up and make a show. As to Chicago, it is a pretty serious problem with a man who has a breeding-animal with show-qualities, to take him there and show him; it is a handicap we are suffering from. While Kansas City and Kansas do not need to add Chicago, I do not know but what we have a big lesson in Chicago this year. I looked upon it as very problematical, but their exhibition there this year has convinced me that they are on the right track. I want to suggest to the breeders of Kansas and to the managers of the Kansas City Royal: Chicago now has made a change in their exhibit on the proposition that all hogs that are exhibited in the show there be slaughtered there—be sold there for slaughter. The same provision can be made in Kansas City, and by extending it and making it on open sows, and the premium list would leave it optional. I would like to renew that proposition, not only to the breeders here but to the management of the show. I would like to have an expression of that kind from this organization. I know the feeling of the stock-yards people is to encourage these exhibits of swine there just as much as cattle. Whether they will be as liberal in putting up their money in premiums I do not know. Chicago is their competitive market. That is well recognized. Chicago is on the border of the hog-belt. Kansas City is near the center of the hog industry of this country. I think that the management of this is just a little parsimonious, and possibly if it was expressed that way they might become a little more liberal.

Mr. Kirkpatrick: We appreciate just as much as the men who lost thousands of dollars worth of valuable hogs the unfortunate circumstances which occurred to them in 1902, when we had the only successful hog-show. But I want to say something and I do not know whether Mr. Kirkpatrick knows it or not, and that is, the manner in which these hogs were handled in Kansas City, and the fact that they were exposed was due to incompetence and neglect on the parts of the railroads and stock-yards company and not the switching facilities or terminal facilities. It was the first year we had a hog-show. The proper precautions had not been taken for handling the hogs after they landed in the city. I do not believe there is any more danger than in exhibiting in Des Moines, providing there is as much precaution taken as there was in the last few years.

Mr. Kirkpatrick: I wish to say that I do not want you to understand that I have undertaken to criticize the management of the American Royal, especially the stock-yards people, or lay any fault to them for the trouble we had in that show. I do not think they were to blame. I think it is a matter that the railroads explicitly performed. I apprehend that that trouble would be entirely eliminated. I did not attend the Chicago International, as I would like to have done, and I do not know much about the exhibit there except through the Breeder's Gazette. I would say that my pre-dilection would be for a breeders' show at Kansas City by all means, if the breeders will lay aside their prejudices against the trouble that might occur.

Mr. Mains: It was stated that a show could be held there as safely as in any of the State exhibits—Illinois, Iowa, or Nebraska. Now, I don't believe it is possible to hold a swine-breeders exhibit at Kansas City and be as safe and immune from disease as those other places at Springfield, Hutchinson, Topeka, or Des Moines. Visitors at the Royal Show generally go through the stock yards, and of course they are in there inspecting the hogs, and they are more liable, it seems to me, to import the germ in some way or other. It can be done

very easily, and while all the precautions may be taken against it; and yet, while passing through where it is existing it can be carried into this show, and the breeders all over the States are interested in the spreading of this disease. A few men may take the risk, go there, and spread the disease. It may be possible that you can have a swine exhibit and prevent any spread of disease, but I do not think it is nearly as safe as those other places.

At this point President Potter said that he had a few matters to present for the consideration of the meeting, as he had mentioned the day previous:

1. Pay your dues. We can not long run this organization without the means. It takes money as well as brains. Now, our worthy secretary has furnished us the brains; he has managed our work in a splendid manner. I do not know how we could get along without him. I hope he will live long and give us many years of service yet. But it takes money to publish these excellent reports. Look at those on the desk—some very fine speeches there from the best men in our country. Our dues are very light.

2. The greatest interests in Kansas (that is, the stock interests) should have reasonable encouragement by legislative appropriation to publish our proceedings, and assist as far as necessary in the expense of a State fair at which we may exhibit our stock. See that such men go to the Legislature as understand your interests, and you can do it. It is a disgrace to the stock interests of Kansas to say that you can not do it. You can. You don't go to the primaries, that's all. You don't look after it, when the servants of the "dear public" are looking after them. That is the limit of their interest in the State of Kansas. You should have had other men there, and you can have them there. How many of you think I have given you a receipt that can not be carried out? Every stockman here knows that the stockmen have control of the election in his county. In this age of combination and corporate power, in the business world, supplanting the individual by corporation in the production of all that farmers have to buy, your president calls upon you as one of the most intelligent and important organizations in Kansas to attend the primaries and conventions and see to it that such men go to the Legislature of our State and to our Congress as will give the people proper protection against the greed of corporate power. That is an easy thing to do. You have not done it, that is all. Will corporate power own us and control us, or will we control them? (A voice: "They own us to-day.") They own us to-day. Quite right. We have seen it demonstrated, and they own us because we have been absorbed in our especial business, and they have been absorbed in their special business. Our special business has been to look after our stock; their special business has been to look after us and see to it that we do as they have cut and cried—often outside the State of Kansas, over in Missouri—and they come here and ask us to adopt the work that they had done there. It comes to my knowledge since I left home that to-day there is one of the most powerful political combinations that was ever formed in Kansas (we are talking here now in our little family), whereby a coterie get together and run the politics of this State, and run the business interests of this State so that the profit of it shall go into their coffers. It is true the business men got their hands off the one thing, and in raising horses and cattle and hogs, combine with it a little good, sound, business administration sense in the affairs of our State. Now, I am a Republican, and have been all my life, because I believe the Republican party comes nearer protecting the interests of the masses than any other party. My friend Glick is a Democrat because he believes the same in reference to the principles of the Democratic party.

Governor Glick: Will you please let me ask you a question? Who is protecting us against the wheat combine and the elevator combine?

President Potter: If these parties, Republican and Democratic, both lose sight of the high calling which the people have marked out for them, what use have the people for these parties? Gentlemen, I am a Republican, as I have said, because I believe it comes closer to the people, but I believe in being a man rather than a partisan. Now, we might go on by the hour, when you bring in illustrations such as our friend Glick has referred to. To me, one of the most humiliating scenes

Dietz Lanterns

The people who study lanterns and know what they ought to get and what not to get in a lantern are Dietz buyers. When they know all about the can't-leak oil pot, made of tin without a speck of solder, the best quality glass, tin and wire, the convenient side lever, the all-round convenience, the cleanliness, the safety of a Dietz Cold Blast lantern, a dealer has trouble in selling them any other. Then, when they think of the

"Clear, White Light of the DIETZ"

that settles it. You'll find a Dietz lantern dealer in most every town. But before you go to buy let us mail you free a book to post you up a little. You'll not be persuaded if you're posted. Then if you find no Dietz dealer in your town, just write us.

R. E. DIETZ COMPANY,
67 Laight St., NEW YORK CITY.
Established 1840.

SECURITY Stock Food

is sold on the honest plan of satisfaction or no cost. This is a straightforward plain talk and means just what it says.

Use Security Stock Food (glutenized) for growing animals; for fattening animals; for work horses; for milch cows. The Food won't cost you a cent if you can't see that Security Stock Food has saved feed, made quicker growth; kept your animals in better condition, given more milk, and made you more money. Write us if not satisfied and we will refund price in full. You are the sole judge. No questions asked.

For five years this guarantee has been on every package sold. It also covers Security Poultry Food, Lice Killer, Gall Cure, Colic Cure, Worm Powder, Calf Food, Heave Remedy, Healer and Rheumatic Liniment. Security preparations are sold by dealers in almost every town in the United States, who will recommend them highly and "backup" our guarantee.

SECURITY IS THE ONLY GLUTENIZED STOCK FOOD.

SECURITY STOCK FOOD CO.
MINNEAPOLIS, MINN.

CAR-SUL

The Disinfectant Dip
That Is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Originators of Dipping Tanks. 1501-03 Genesee St., Kansas City, Mo.

BOWSHER

(Gold with or without elevator.)
Crush corn (with or without shucks) and Grind all kinds of small grain, and feed kalfir. Use Conical Shape Grind ore. Different from all others.

LIGHTEST
RUNNING.

Handy to Operate. 7 H.P.—2 to 50 H.P. One also for wind wheel use.

Also make Sweep Grinders both Gear and Pellet.

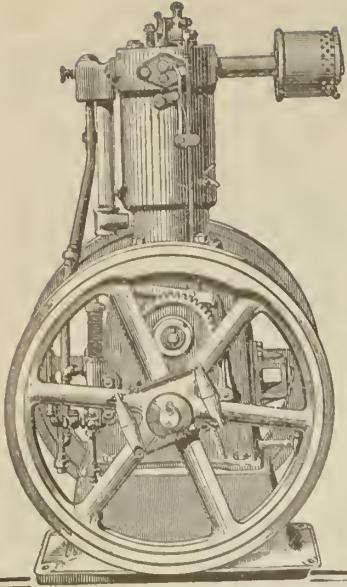
C.N.P. Bowsher Co.

South Bend, Ind.

FEED MILLS

SCALES
ALL STYLES
LOWEST PRICES
100 DAYS
FREE TRIAL
PITLESS
AMERICAN SCALE CO.
KANSAS CITY, MO.

STOLL'S STAY-THERE
EAR MARK.
The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send or samples. M. C. Stoll, Seneca, Mo.



Gasoline Engine Superiority

When a man invests in a farm power, he owes it to himself to get the best that can be bought for the money.

The modern business farm can no longer be successfully operated without a power of some kind.

The best, most economical, and safest farm power is a gasoline engine.

The best engine is the

I. H. C. Gasoline Engine.

Why? Well, because it's so simple, easily kept in order and operated definitely.

It develops the full rated horse power and sustains it against the heaviest load.

It is safer, cheaper and more efficient than steam power.

It is adaptable to any and every use requiring a power.

Among its many uses may be named:

Shelling, Husking and Shredding Corn; Grinding Feed; Cutting Dry Fodder and Ensilage; Pumping; Sawing Wood; Separating Cream, Etc.

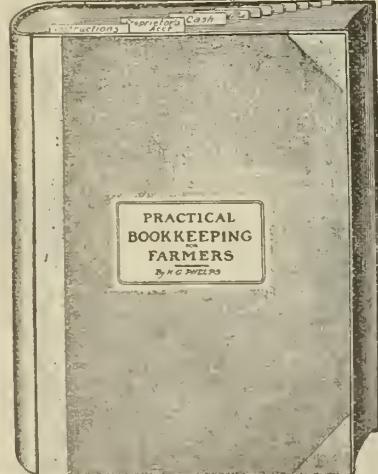
I. H. C. engines are made in the following styles and sizes:

Vertical, 2, 3, 5 Horse Power.
Horizontal, Portable and Stationary, 4, 6, 8, 10, 12, 15 Horse Power.

If interested in powers in any way, go to the International Local Agent and have him show you the I. H. C. gasoline engine, and supply you with catalogues, or write for further information.

**INTERNATIONAL HARVESTER COMPANY
OF AMERICA, CHICAGO, ILL., U. S. A.**

(INCORPORATED)



The farmer's guide to success in farming. 200 pages 10x13 inches. 20 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of a whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free. Send us ten 2-cent stamps and we will mail you our latest book—a 50-page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$4.00.

Address H. G. Phelps & Co., Bozeman, Mont.

SKUNK
Mink, Muskrat and all other furs bought at market prices. Quick cash returns. TRAPPER'S GUIDE FREE to those who ship and mention this ad.
McMillan Fur & Wool Co.
MINNEAPOLIS, MINN.
WRITE FOR CIRCULARS.

that ever transpired in our beloved State transpired a couple of weeks ago down in the room of the Railroad Commission, the great milling industry of Kansas, whose beautiful edifices adorn nearly every town in our State, whose intelligent owners and whose business ability and push and enterprise would be an honor to any gathering anywhere; when the interests of the masses of the State—the great wheat-producing masses which have given our State such a reputation as I told you about last night—the grain markets of the world stopped to find how conditions are in our State—when the interests of those who bring forth the great wealth-producing article of wheat come up for a little favorable consideration, and are compelled by corporate power to bow down before that power and interplead that these masses have no relief, I am humiliated. I want to say to you gentlemen that I feel that that was one of the most humiliating things that ever occurred in this State, but it is one of the greatest revelations of the strength and influence of this corporate power in our State; and when I talk of corporate power what do I mean? I mean the power that you have given certain individuals through your representatives in this State, and if you had the power to give these organizations this influence is it not time you were acting again and sending some agents there that have the power to curtail this influence? Shall the thing formed stand up before the world and say to him that formed it: "Why hast thou made me thus?" It is time the people were aroused.

Governor Glick: You have given us a pretty good pointer, but you have only given us half. You have not given us half. (The Ex-Governor went on to speak of the pass evil in connection with judges of courts, and spoke of a corporation sending a judge and his family to Boston in a private car, and paying for their entertainment). You have got to get after the courts. You have got to find out whether the man you are voting for for judge has the courage to refuse passes from railroad corporations, or from any other corporation. You have had a good example in Mr. Bonaparte who refused to accept railroad passes from any railroad in the United States. You do not want a judge who has to have a separate pocket-book to carry his railroad passes in.

President Potter: We are going to make it a criminal offense to accept a pass when we get the right kind of a Legislature.

Mr. Harrington: I know of no people in Kansas that are ahead of or above the farmers of Kansas. I believe it is the best calling in the State. I have heard no man say one word against the Governor of the State of Kansas, and you won't hear it from me. He is my Governor now, and when the Governor of Kansas stands for the laws of Kansas I stand for the Governor of Kansas. We have a whole lot of laws in Kansas that are not obeyed. They ought to be. I believe every law on the statute book ought to be enforced, whether you like it or whether I like it. We put in our old friend Robison for Railroad Commissioner and I believed he had backbone, and I watched him the other day when the railroad hearing came before him, and I thought he would surely stand firm. I found him like the Dutchman that cut off his dog's tail a little bit at a time so it wouldn't hurt him so much. I think he ought to have stood for 15 per cent. Trusts and combinations are growing up all over the State of Kansas. We have a grain-dealers' trust in Kansas. It ought not to exist twenty-four hours. It's an illegal body and ought to be suppressed, and I have told them so more than once, but as a grain-dealer I can not fight the great corporations of the grain-dealers. If these men would take hold of it and wipe it out, I would be very glad of it, but as a grain-dealer I know very well I can not fight it. I know very well if the trust or combination should report to the railroad company that I had been kicking over the traces, I would be held up. I have been held up before, but there is or ought to be a power that can protect the people of the State of Kansas. We Democrats cut very little figure. We wish to have these things done, and we will do you all the good we can, and if you catch a man in office who does not carry out the principles announced by Mr. Potter and Mr. Glick we will just try and get him out as quick as we can. You have a man in the presidential chair who suits me the best of any Republican

you have ever had there; I think there is Democratic stamp about him, and I am disposed to take him seriously; and I am disposed to assist the President of the United States in every way possible. But you have got some old, superannuated Senators down there, who have bought their way into Congress, who will block the game. Go to work and see to it that you get men in the United States Senate (if you have not got them there) who will stand by the President. It's a question in the State whether the railroads shall go out of the governing business or whether the people shall go out of the governing business. We have given them special privileges and they are wanting more all the time. You feel and I feel that we are being appressed by a corporation that we have built up. We do not want to tear it down, but we want it to get right.

Mr. Kirkpatrick: Mr. Potter occupies the throne to-day and he has a right to criticise Mr. McGuire and Mr. Harrington. But there is a power greater than the throne and that is justice; there is a power greater than justice and that is the people. It is the people we want to arouse to-day, and certainly Mr. Potter's suggestions there are right to the point, and if the committee on resolutions do not take this into consideration and say things which will arouse the people to a sense of obligations to this commonwealth, I hope you will do it yourselves.

Mr. Gaines: The trouble with the people to-day is they are lacking backbone. They have not got enough spine. Our president here has the spine, and he is not afraid to get up here in public and say what he believes. The trouble is as Brother Kirkpatrick expressed it—the people are to blame. You want public opinion? Look at the last Legislature, when the people were aroused as to needed legislation to fight the Standard Oil Company. What was the result? Why, the Legislature said, we will do it. Then one of the short-grass legislators, a lawyer now indicted by the federal grand jury of this State, wrote the law, and the Supreme Court said it was unconstitutional.

President Potter: You will hear this statement, that certain individuals are fighting the railroads. I do not know of a man in the State of Kansas who is fighting railroads. I have been closely connected with this transportation question for years. The organization known as the Kansas Stockmen's Association, to which you all ought to belong, has been accused by the railroads—by a leading freight agent in Kansas City: "You Kansas cattlemen have cost the railroads \$2,000,000." What did he mean by that? That we had taken that out of their treasury? No, that we prevented their going down into our pockets and taking out that two millions extra. Gentlemen, that's a false issue raised by railroad men and railroad influence, intimating that we were trying to injure one of the greatest commercial industries of the State of Kansas. We are proud of the railroads and of what they have done for us, but let us see to it that they keep in their proper place.

The Dairy Cow.

By Prof. O. Erf, Dairy Husbandry Department, Kansas Agricultural College.

I just have a message for the dairy cow, that old animal which has redeemed Kansas; that old animal which to-day nourishes about 65 per cent of the infants of the country. I have a word for her because she is profitable; because wherever she is introduced she brings prosperity into that country. You may ask, "How is this, and how can you prove that statement?" I can only cite you to the East. Go back into the Mohawk Valley, and you will find one of the most prospering countries of the world, brought about by dairy conditions. You will find that there land is worth \$100 to \$150 per acre. Go across a hill and you can buy land for \$25 and \$10 per acre. Of course, there was a certain advantage in that particular country. That valley had a railroad which transported the milk to the city; the other valley did not. The Mohawk Valley consequently was adapted for the dairy while the other valley was not. It is for this reason that land is high-priced in that valley. I can cite you to a good many other cases. Take, for instance, Jefferson County, Wisconsin. Some 25 years or 30 years ago that was a barren county. Those of you who are familiar with that section of the country know that it is very hilly.

5,000 Rifles SEND NO MONEY
FREE TO BOYS

Just send us your name and address so that we may tell you how to get this fine rifle **Absolutely FREE**.
YOU CAN HAVE ONE
As we are going to give away 5,000 of them. We mean it, every word, and this is an honest, straightforward offer, made by an upright manufacturer who always do exactly as they agree. All we ask is that you do a few minutes work for us. It is so very easy that you will be surprised. This handsome rifle is not a toy rifle, but is a genuine steel, blue barrel, hunting rifle, that is strong, accurate and safe and carries a 22-calibre long or short cartridge. If you want a fine little hunting rifle, just write and ask us for particulars. They are free and you will surely say it's the best offer you ever saw or heard of.

BE SURE AND WRITE AT ONCE
before the 5,000 rifles are all gone, as the boys are taking them fast. Address
Peoples Popular Monthly,
562 Manhattan Building,
DES MOINES, IOWA.

No. 331. Canopy Top Surrey. Price complete, \$65.00. As good as sells for \$25.00 more.

33 Years Selling Direct
Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price. We are the largest manufacturers in the world selling to the consumer exclusively. We make 200 styles of Vehicles, 65 styles of Harness. Send for large free catalog.

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, IND.

No. 10. Single Collar and Hame Harness. Price complete, \$14.60. As good as sells from \$5.00 to \$8.00 more.

Tired Nervous

When you feel languid, tired, nervous and irritable, your vitality is low—your supply of nerve energy exhausted, and your system running down for lack of power,

The organs of the body are working poorly, or not at all, and you are not getting the nourishment needed. This soon impoverishes the blood and instead of throwing off the impurities, distributes it all through the body. This brings disease and misery.

Feed the nerves with Dr. Miles' Nervine, a nerve food, a nerve medicine, that nourishes and strengthens the nerves, and see how quickly you will get strong and vigorous.

"My wife suffered with nervousness previous to a recent attack of typhoid fever, but after her recovery from the fever, she was much worse, and could hardly control herself being exceedingly nervous when the least excited. She was very restless at night, and never had a good night's rest. She also suffered much from nervous headache. Dr. Miles' Nervine was recommended by a friend. After the first three doses she had a good night's rest, and at the end of the first week's treatment she was wonderfully improved. Continued use of Nervine has completed her entire cure."

OTTO KOLB,
1021 Cherry St., Evansville, Ind.
Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

When writing advertisers please mention this paper.

At that time Switzerland became over-populated, and they sent some of their people to this country and they located in that county. Not being accustomed to doing anything else but dairying in their native country, they began that practice in Jefferson County. To-day we find Jefferson County one of the richest of Wisconsin. Besides other crops, they grow clover, alfalfa, wheat, oats, corn, equal to that we are raising in Kansas. Besides these crops, they are selling over three million pounds of cheese. The land of that county, which was barren twenty-five years ago, has value equal to that of the bottom lands in counties near the lake. Come farther west—or go back to the Western Reserve—and you will find the same conditions. Go down into the Elgin district of Illinois—right around Chicago—and you will find there electric lines running all through that country—fine hogs, nice lawns, good roads, anything that man can wish for. Some people say that dairying is not profitable, they know because they have tried it. I might say that of a good many cases in Kansas this is true, and I am going to give you an experiment which proves that condition. Fifteen cows—average cows—were purchased, and a yearly record was kept of these cows. The first cow produces butter-fat for 8½ cents a pound. In other words, she charges you 8½ cents for the feed to manufacture a pound. No. 15 produces butter-fat for 24 cents a pound—24 cents she'll charge you for every pound of butter-fat she produces. Let us divide these cows according to their records. We selected five cows which produce butter-fat at an average of 9 cents per pound. We selected another lot because each produces butter for 15.8 cents per pound. Another lot produces butter-fat for 20.4 cents per pound. Now, how are we going to remedy the situation, and how are we going to make dairying in this lot of cows more profitable? Simply, sell the last ten cows and you will have a profitable dairy. If you are getting 15 cents for butter-fat, the middle lot of cows will just balance; though you are not making a profit they will not make you a loss. The top lot will make you 5 cents gain. Now, then, if you will sell the last two lots of these cows you will make \$140 clear profit out of those five remaining cows. If you keep all of them, you will not make any profit at all. Just milk the five good cows and sell all the rest and you will make a profit. How do we know which cows to sell? It is simply this. Take a piece of paper and nail it up against the cow-stable wall. Tie a lead pencil to that. Tie it good and strong, and for three consecutive days put down the weight of the milk produced by that cow. Take a sample and test that milk. Do that for three consecutive days every month, and that will give you a record that is approximately 95 per cent accurate, compared with the record which you would have if you would take the sample every day and weigh the milk. That system is sufficiently accurate in finding out the good and the poor cows. It is an easy matter to estimate approximately the value of the feed that you give these cows during the year, and by a simple computation you can find whether you are making a profit or loss on each particular animal. It has been said that if the angel of death would sweep over this country and kill about half the cows, the farmers would wake up the next morning better off. I believe there is a good deal in it.

Now, as to the matter of feeding. Feeding a dairy cow is a subject of great importance. A cow that produces milk must receive the nutrients that she produces in the milk. We take a number of bottles which represent constituents in milk. One has a pound of fat, taken out of 20 pounds of milk; one has milk sugar, one ash, and one the protein compound. Now, in order for a cow to produce twenty pounds of normal milk you must feed that animal food which contains these compounds approximately in that proportion to do it economically. The protein is the most essential component. It is the highest-priced of any component that you have in the feed, and goes to make up muscle in case of a steer or a hog. In the case of a cow that is producing milk it gives the white part of the milk, the cheesy part. In the hen, of course, it produces the white of the egg. The next important constituents are the carbohydrates, or starch compounds. These go to make heat and fat, and in the milk they make milk sugar, and they also make butter-fat. The fats in the feed go to make up butter-fat and at the same

time supply the heat of the body. The ash, of course, is a very important thing, and every farmer should feed a certain amount of it in the way of roughage. Cows must have roughage as the ash constituent. This is also supplied by salt. Always have salt before an animal, especially a young animal. In the formation of bone it requires a great deal of ash. So essential is the ash compound that in China they use it for executing their criminals. They give the criminal all he wants to eat, but deprive him of the mineral salt. Frequently you see calves gnawing at posts, boards, or gnawing the ground. They are after salt. They are after mineral matter. Nature gives them that peculiar instinct to get salt.

I said that carbohydrates or starchy material produces heat and fat, and also that fat produces heat and fat. What is the difference between the two? It is simply this. Starches are generally in plants. You do not find starchy compounds in the body except those that have been immediately absorbed by digestion. Suppose you had a steer with 500 pounds of fat on him; transform that fat into carbohydrates and he would be walking around two and a half times larger than he actually is. There are two kinds of feeds, the roughages and the concentrates. We feed the concentrates to give nutrients which are easily assimilated. We need the roughages to give bulk, to start the motion of the intestines. We can not feed roughages altogether and get the best results. We can not do that because the nutrients are not there in sufficient quantity. We will take an illustration for your use. We can eat a pound of beefsteak quite nicely each day without any inconvenience. Suppose we should supply you with a feed of strawberries. You would have to eat 87 bushels every day in order to get the same amount of nutrients as you get out of that beefsteak. This gives us the reason why we need the roughages and why we need concentrates.

Now comes the question of balancing these rations. We say that protein is to produce casein in the milk, and muscle in the steer. If you feed too much protein, you overtax the kidneys. You cause an irregular disturbance in the body. The protein has to bear being transformed into fat, but you can not transform fat into protein. The kidneys do most of this work, and in the case of a horse when you feed too much alfalfa hay, or in other words, when you feed too much protein, you have an azotic condition. In a human being you will have Bright's disease. There is another problem. I said that any feed that is high in protein is also expensive, consequently, if we can substitute a cheap feed, a starchy feed like corn, and feed just the right amount of protein, we will reach two results: First, it will be cheaper, and second, it will be more easily digested. In the case of a cow that produces this amount of milk we need daily 2½ pounds of protein, we need 13 pounds of starchy material and half a pound of fat. That will supply the nutrients in right proportion to give twenty pounds of milk with the normal constituents.

How can we balance these constituents? There are a great many bulletins issued which give all sorts of combinations from which you can select. Some of these will apply to your individual conditions. But I might say that one of the most practical rations, one of the most economical rations that can be devised for an agricultural State like Kansas is 18 pounds alfalfa hay and about 8 pounds of corn. That will give these constituents in just the right proportion. I am going to show you the reason why we should feed 18 pounds of alfalfa hay in connection with 8 pounds of corn. The protein is much less in the corn than in the alfalfa hay. We only have a half pound of protein in the corn, while we have pretty nearly two pounds in the alfalfa hay. We have five pounds of starch in the corn and we have only three pounds in the alfalfa hay. We have a little, about .6 pound of fat in the corn, while we only have .3 pound in the alfalfa hay, showing you that the relations of these constituents are different with the different feeds. Bear in mind that all feeds contain protein. All feeds contain carbohydrates, but their proportions are different. We must find a combination that will give us the proportion such as I have stated—2½ pounds protein, 13 pounds carbohydrates. Now, in 18 pounds of alfalfa hay we have two pounds of protein; and fed in connection with eight pounds of corn which contain ½ pound of protein we have the balanced ration, because here is the other half

You never tasted meat so sweet and well kept as ham smoked in the new way with Wright's Condensed Smoke. If you have ham, bacon or any kind of meat to cure

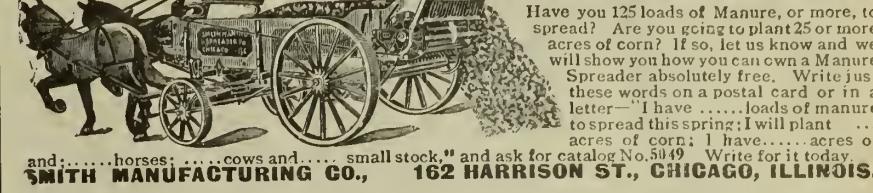
WRIGHT'S CONDENSED SMOKE

will cure it perfectly without loss of time or meat. Easy, certain, safe, healthful. Bottle smokes 280 lbs. At druggists 75 cents. Fully guaranteed. Write for "The New Way" Tells ALL about it.

The E. H. Wright Co., Lt'd., 112 W. 4th St., Kansas City, Missouri

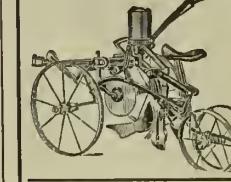
FREE

70 Bush. Great Western SPREADER FREE


Have you 125 loads of Manure, or more, to spread? Are you going to plant 25 or more acres of corn? If so, let us know and we will show you how you can own a Manure Spreader absolutely free. Write just these words on a postal card or in a letter—"I have loads of manure to spread this spring; I will plant ... acres of corn; I have acres of

and horses; cows and small stock," and ask for catalog No. 5049. Write for it today.

SMITH MANUFACTURING CO., 162 HARRISON ST., CHICAGO, ILLINOIS.



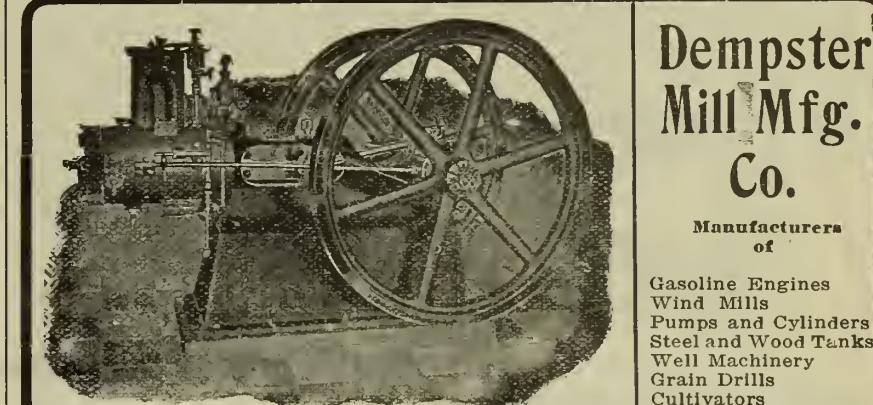
The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1310 West 13th Street. - - - KANSAS CITY, MISSOURI



Dempster Mill Mfg. Co.

Manufacturers of

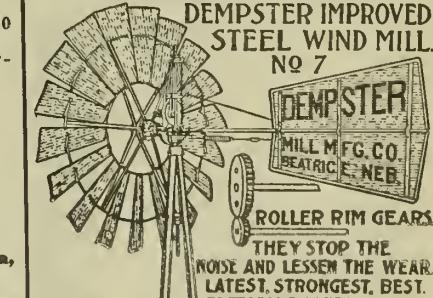
Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

"Dempster Gasoline Engines 2 to 30 H. P.—2 and 4 cycle Horizontal or Vertical—for any duty."

Western Made
and
Well Made

Factory, BEATRICE, NEB.

Branches:—KANSAS CITY, Mo., Omaha,
Neb., Sioux Falls, South Dakota.



DEMPSTER IMPROVED STEEL WIND MILL
No 7
DEMPSTER
MILL MFG. CO.
BEATRICE, NEB.

ROLLER RIM GEARS
THEY STOP THE
NOISE AND LESSEN THE WEAR
LATEST, STRONGEST, BEST.
FACTORY, BEATRICE, NEB.

It Will Pay You To Investigate

the merits of the

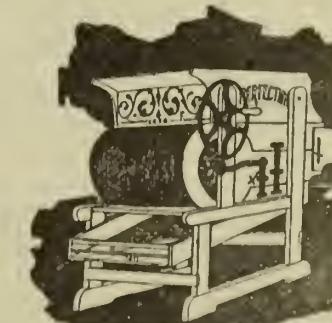
"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.

\$



\$

This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305 Kansas Avenue, Topeka, Ks.

DON'T SEND EAST for your Single Comb Brown Leghorns. In four shows this season I have won 16 out of 19 blue ribbons competed for, and in three of these shows have had highest scoring bird in the show. Scores as high as 95½ by Owen and Atherton and 91½ by Throles. Stock for sale. Eggs \$1 for 12, \$6 for 100.

CHARLES C. SMITH, Manhattan, Kansas

pound of the protein. We have over five pounds of starch in eight pounds of corn, and in 18 pounds of alfalfa hay we have over 7 pounds of starch. The two together will give us the 13 pounds that is necessary, and the same is true of the fat.

A word in regard to the care of the cow. In order to have the best results from a dairy cow give her the best care. We found last winter by a reduction of 40 degrees in the temperature a 10-per-cent decrease in the flow of milk, and if you have a moist condition, if you subject your cows to a rain, a 20-per-cent decrease in temperature will amount to the same as a 10-per-cent decrease in the temperature when the atmosphere is dry. So build her a nice stable if you want her to be profitable. Another point: In coming this afternoon from Manhattan—just about time to get the cows—I noticed two boys on horseback. They were hunting the cows. They were in the corn-stubble, and they had a dog, and they were bringing the cows in "lucky-cut;" just as fast as the horses could gallop. I will venture to say that there wasn't 50 per cent of the milk left in those cows when they reached the stalls. I wish that I could tell you more about these conditions, but beyond all circumstances I advise you to keep a few cows. I believe it is the best thing for Kansas. I believe that in future years you will regret it if you do not keep a few cows. The cow is practically the only animal that will give it up all the fertility of the feed and can be taken back onto the soil. I have stated to you a case where a county has been redeemed by this fertility. I want to show you a chart which gives the average compositions of manure from cows. I want to show you a chart that estimates the

value of manure from a single cow at \$25, \$29 worth of fertility that they can produce yearly. Now, you might say there was no need of my dwelling upon that subject. We have all the fertility that we need for ages in our soil. Ten years ago I heard that remark in the great rich State of Illinois, where they have this type of muck soil. To-day they find it profitable to use commercial fertilizers simply because they have not taken care of the food elements.

DISCUSSION.

Mr. Robison: I did not hear you compare but two feeds—alfalfa and corn.

Professor Erf: I think they are the best and cheapest. Another good ration is alfalfa hay about 17 pounds, about 7 pounds of corn and two or three pounds of bran—this makes an excellent ration. I might say that with 18 pounds of alfalfa and 8 pounds of corn the third cutting of alfalfa or even the fourth will give better results than the first or second cutting.

President Potter: Your ratio would be a little over 1 to 5 for fattening steers, between your protein and carbohydrates.

Professor Erf: For fattening steers, yes, sir.

Professor Kirkpatrick: I have a few cows; I am not making a business of dairying, but have got to have some milk for my pigs, and I am all wrought up over the proposition that I ought to know what my cows are doing. I would like to know how I am going to test my cows to find out. Is there any short cut now by which I can test my few cows without going to great expense?

Professor Erf: The Babcock tester will cost you about \$4. You can afford to keep a man to test the milk.

Mr. Kirkpatrick: That is the best method, then, Professor?

Professor Erf: Yes, sir.

Mr. Coburn: What is the maximum amount of alfalfa that a man would be justified in feeding a dairy cow in milk if she was given a suitable quantity of some grain?

Professor Erf: That depends greatly on the alfalfa. Of the first cutting you can feed an almost unlimited quantity.

President Potter: Do you think it unsafe to let our stock run to alfalfa stacks—let them have all the alfalfa they want?

Professor Erf: For the first and second cutting I should suggest that would be all right, but for the last cutting it would not be advisable. I understand our friend Robison allows his Percherons to run right to the stacks.

The professor was asked regarding the dual-purpose cow.

Professor Erf: The dual-purpose cow is all right for the dual-purpose man, but the dairy cow is the kind for the dairyman. I must admit that some farmers make a great deal more money from their dual-purpose cows than they would from a Jersey or dairy cow. The dairy cow is a bundle of nerves, and any excitement, any uncomfortable condition that is brought about will decrease the flow of milk. The dual-purpose cow can stand a great deal of these uncomfortable conditions without making any difference in the flow of milk. Now, the question as to when a dual-purpose cow becomes profitable is simply a question of record of that individual animal. This matter of dual-purpose is one that is talked about much, but records are not given of these animals. If you can get a cow that produces a large amount of butter-fat and at the same time produces a calf that is worthy of raising to a steer, so much the better; that is a cow we want to propagate. But remember when you are breeding for a certain thing you have to breed along that line. Remember you cannot shoot at two objects.

A Member: I don't hardly coincide with the gentleman. He says we cannot shoot at two objects at the same time. We can if we have a shot-gun that scatters.

A Member: I have attended the International show every year but one since it was established. I never saw dual-purpose animal stand up in that ring. When it comes to these western range calves, they have gone to Chicago year after year and won everything. I do not believe the man ever lived that saw a high-class show cow, from a beef standpoint, that could be put into the milking test, and I do not believe he ever saw anything that could be reversed the other way.

Mr. Blair: The dairy cow is of nervous temperament; now, in excitement we tend to lessen the flow of milk and also decrease the amount of butter-fat. I want to ask this question: Does the amount of butter-fat depend on the

nervous system in the cow, or the physical structure?

Professor Erf: The nerve is the engine which propels the whole business. Do you know that a milker can increase the flow of milk, and not only increase the flow of milk but increase the butter-fat constantly simply because the nervous system accords with the man. The cow likes the man; throws out her sympathy to the man, and we can not attribute it to anything else but the nervous system. Of course, if you do not feed a cow, you can not expect milk from her.

A Member: I admit that a good many of us are not capable of discussing this question, but I believe the Red Polled people are breeding what they call a dual-purpose cow.

Mr. Halderman: I would like to give a little of the experience I have had and get a little information along with it. I have milked dairy cows, or so-called dairy cows, all my life. For the last twenty years I have milked the purebred Holstein. Prior to that time I milked Shorthorns. I found some of the Shorthorns that were very good milkers for about four months, but after that time they would fall off in milk, and would lay fat on their back. But the last twenty years I have milked dairy cows (Holstein) exclusively. I kept a herd of Jerseys along with them in the same barn. Some of the Jerseys were good cows, but I must say there were four-fifths of them that I do not want in the barn.

Mr. Stone: I want to say in the first place I have as good authority as there is in this State that there is only one cow in seven in Kansas that is paying for her keep. Now, you people may think that is an exaggeration, but it is true just the same. These records show it pretty well, but those probably are selected cows; there are cows that will drop a long ways below that. If you dual-purpose men have got a cow that is not producing over and above her keep, you want to dispose of her.

Professor Erf: I want to say that I am not opposed to the dual-purpose cow. We have Red Polled cattle in our dairy that are good cows; but I want to say one word more, that the profit on an animal depends on the individual. It is the individuality. The gentleman back there told the whole thing in a nutshell; it does not make any difference what kind of a breed you have got. Figures will tell whether they are profitable.

Government Encouragement of Imported Breeds of Horses.

Geo. M. Rommel, Animal Husbandman, Bureau of Animal Industry, U. S. Department of Agriculture.

In the discussion of this subject we shall consider what has been the Government's policy in history, what is its policy at the present time, and what may be its policy in future, always keeping in mind the effect of these policies on the horse-breeding industry. As the tariff laws in this respect have been drawn to apply to all classes of domestic animals, the encouragement of the importation of horses for breeding purposes is only a part of the whole, although the horse-importing business has come to be the most important. It will be necessary to consider the subject first as it applies to all classes of animals.

The Historic Policy.

The historic policy of the United States Government regarding the importation of domestic animals has been that when such animals were imported for breeding-purposes, no duty was to be imposed by the Customs officers. One of the earliest tariff acts on the statute books is that of February 27, 1793, which provides "that the several laws of the United States, imposing duties on goods, wares, and merchandise imported into the United States, so far as they may be deemed to impose a duty on horses, cattle, sheep, swine or other useful beasts imported into the United States, for breed, shall be repealed." With one exception every tariff law enacted since that date has placed breeding animals on the free list. That exception was the act of May 16, 1866, which placed a duty of 20 per cent ad valorem on all animals imported. It was superseded by the act of July 14, 1870, which removed the duty on "animals specially imported for breeding-purposes from beyond the seas, . . . upon proof thereof satisfactory to the Secretary of the Treasury."

Up to the act of 1866, no restrictions seem to have been placed on the use of this privilege, and the act of 1870 is the first one which specifically provides that satisfactory proof should be submitted, that the animals for which the duty-free privilege was claimed, were actually imported for breeding pur-



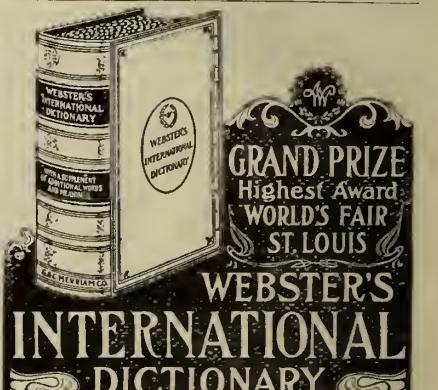
WHAT THIS PHONE SAVES EVERY DAY

C It saves going to town for market reports, it saves the buyer of farm produce a trip to your farm and brings you a sale. It saves the farmer's wife getting Sunday dinner "because John just telephoned that he couldn't come." It saves the doctor an extra trip and you more than one half of the bill because you can stop him from coming when you don't need him. This telephone saves extra trips to town, extra wear on the team, saves time, temper, money and in many instances life itself.

C This telephone is the "Eaco," and is the most complete farm telephone made. There is nothing that can get out of order with ordinary use, being made strong and compact. Eaco phones are handsome from every point of view and are low in price. Each telephone is furnished complete with two cells of 1900 Dry Battery and all are equipped with X. P. Condensers. This makes it possible to ring any subscriber whether people "listen in" or when the receivers are off the hooks. On a line filled with 20 bridging telephones each phone equipped with an X. P. Condenser we will guarantee to ring the 20th phone with 18 receivers off the hooks provided it is possible to ring each subscriber with the receivers on.

C Let us tell you more about the many points of this special farm phone through our booklet, "How to Buy the Right Phone." Mailed free.

ELECTRIC APPLIANCE COMPANY
Dept. P Chicago, Ill.



GRAND PRIZE Highest Award WORLD'S FAIR ST. LOUIS WEBSTER'S INTERNATIONAL DICTIONARY

RECENTLY ENLARGED WITH

**25,000 New Words and Phrases
New Gazetteer of the World
New Biographical Dictionary**
Edited by W. T. Harris, Ph.D., L.L.D.
United States Commissioner of Education.
2380 Quarto Pages. 5000 Illustrations.

Also Webster's Collegiate Dictionary
1116 Pages. 1400 Illustrations.
Regular Edition 7x10x2½ inches. 3 Bindings.
De Luxe Edition 5½x8½x1½ in. Printed from same plates, on fine paper. 2 beautiful bindings.

FREE, "Dictionary Wrinkles." Illustrated pamphlet.
G. & C. MERRIAM CO.
Publishers, Springfield, Mass.
GET THE BEST

DES MOINES TANNING CO.

Hides Tanned and Mfg.
into Coats, Robes,
Rugs, Etc.

**WE GUARANTEE
OUR WORK**

DES MOINES TANNING CO.,
Des Moines, Iowa.
WRITE FOR FREE BOOKLET NO. 51

U.M.C.

METALLIC CARTRIDGES

Take U.M.C. Cartridges for Buck Fever

They'll give you confidence and steady your nerves. Always accurate, sure fire and hard hitting.

U.M.C. cartridges are guaranteed, also standard arms when U.M.C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.
Agency: 313 Broadway, New York

Seed Potatoes

To Grow Big Crops and best potatoes plant Our Red Rover Grown Stock. They are unsurpassed in quality and early maturity. Our Stock is the largest and prices lowest. Our Big fine illustrated Catalog is FREE; gives prices and descriptions of every seed that grows. Send for it; a postal card will bring it to your door.

Address:
RATENKIN'S SEED HOUSE,
Shenandoah, Iowa.
(The largest Seed Corn Growers in the World.)

THE Victor BOOK

is FREE for the asking. Drop us a postal today and learn the difference between the ERTEL machine and the cheap kind. The Book tells facts you ought to know if you are thinking of an investment. There's money in chicken raising—big profits in duck—large returns on incubator-hatched turkeys. Let us start you right. Don't waste eggs, oil, and time on a poor machine. Get the benefit of our 39 years experience. Profit by the successful methods of others as described in our book. Write for today.

Geo. Ertel Co. Quincy, Ill.

FREE

To introduce our up-to-date jewelry we will give away, absolutely free, this handsome Perfumed Lucky Charm, the latest novelty. Send your name and address to-day and we will forward it to you at once without expense to you. Wear one and be in luck all the time. Address,
MILFORD JEWELRY CO.,
Dept. 1145 Milford, Conn.

poses. These restrictions were necessary to protect American breeders and to prevent frauds upon the Customs, which were obviously possible under the old laws. They have been broadened considerably as I will point out to you later on.

This is our historic policy—that domestic animals of all kinds, not only horses, but cattle, sheep, hogs, and similar animals of the farm, when of superior merit and imported with the idea of improving the domestic stock, should be charged no duty, but their importation encouraged. Europe began the improvement of the breeds of live stock long before the new world; here pioneers started out with the same kind of animals as they had in the old homes on the other side of the Atlantic (and it is not unreasonable to suppose that they were good ones of their sort), but these pioneer farmers were too much occupied with their struggles with the forest, the Indians, and with politics to devote a great deal of attention to the improvement of their breeds of live stock. When they finally wished to do this, they found Europe far ahead of them and naturally saw that great strides could be made by the use of the best animals from European breeders. The idea seems to have been that this improved blood would be used to give our farmers a more superior grade of breeding stock than could be obtained from native sources, and that liberal provisions of the tariff would enable our breeders to establish these improved breeds at the lowest possible expense.

The Present Policy.

You have seen how the first restriction as to the purpose for which breeding animals were imported was imposed by the tariff act of 1870. This remained unchanged for twenty years until the passage of the McKinley act on October 1, 1890, when the first restrictions were imposed as to the character of these animals. This law provided that "Any animal imported specially for breeding purposes shall be admitted free: Provided, That no such animal shall be admitted free unless pure-bred of a recognized breed, and duly registered in the book of record established for that breed: and provided further, That certificate of such record and of the pedigree of such animal shall be produced and submitted to the Customs officer, duly authenticated by the proper custodian of such book of record, together with the affidavit of the owner, agent or importer that such animal is the identical animal described in said certificate of record and pedigree. The Secretary of the Treasury may prescribe such additional regulations as may be necessary for the strict enforcement of this provision." This remained unchanged for over twelve years.

In December, 1902, the Board of General Appraisers ruled that this provision applied only to animals intended for the immediate use of the importer and not for sale, and an additional act was passed on March 3, 1903, providing that the duty-free privilege could be obtained whether the animals imported for breeding purposes were intended to be so used by the importer or for sale for such purpose." This act also amended the phraseology of the preceding ones by changing "book of record" to "books of record," and stipulated that the privilege of free entry in these cases would be extended only to citizens of the United States. Under the provisions of these laws, the Treasury Department has issued the necessary supplementary regulations from time to time. All importers are familiar with them and it is hardly necessary to discuss them here.

The connection of the Department of Agriculture with this work dates from the passage of the annual appropriations act on March 3, 1893, which provided "that the Secretary of Agriculture shall determine and certify to the Secretary of the Treasury what are recognized breeds and pure-bred animals," under the provisions of the McKinley act then in force. This provision was included in each annual appropriations act for the Department until the passage of the Dingley act on July 24, 1897, when it was included in the clause regarding the importation of animals for breeding purposes.

The powers of the Secretary of Agriculture under these provisions apply to all points which may come up, touching not only what books of record shall be recognized, but the validity, authenticity and sufficiency of pedigrees and what constitutes a pedigree; and these powers have been sustained in the courts.

The Department certifies not only books of record doing business across the seas, but also those in the United States, the latter being certified to provide for the importation of animals

from Canada, as no Canadian books are certified.

Until 1904 the Department promulgated no specific regulations for this work. For about a year, the certification and supervision of books of record and pedigree record associations had been part of the work of the Animal Husbandry Office of the Bureau of Animal Industry, and on October 14, 1904, B. A. I. Order No. 130 was published. Up to this time the requirements for certification had been broad, and they still are, but a tendency to take advantage of them had begun to manifest itself among American associations, and it seemed necessary to take steps to exercise a closer supervision, so that the Department would have accurate means of knowing what associations were doing a live and legitimate business and were entitled to certification; this policy is carried out by liberal interpretations of the laws on broad lines without discrimination as to breed or sex.

Bureau of Animal Industry Order No. 130 makes provision for the application of new associations for certification, and requires each certified association to make an annual report to the Department and publish a volume of its book of record at least once in four years. All certified American associations must hold their books open to inspection by the Department, if such inspection is deemed necessary. Foreign associations are required to keep their books of record on file. In its dealings with the latter, the Department is guided by the advice of certified associations in the United States. American representatives abroad, and its own inspection of their books of record.

Up to date, 14 amendments to this order have been issued; dealing with the granting, withdrawal, or amendment of certification. The following table shows the number of books of record now certified:

Books of Record of Pedigrees Certified by the Department of Agriculture, Under the Provisions of B. A. I. Order No. 130, and Amendments 1-14.

	American.	Foreign.
Cattle	14	30
Horses	18	23
Asses	1	1
Sheep	21	13
Hogs	13	2
Dogs	1	4
Cats	2	..
Total	70	73

I have gone into this rather tedious discussion of Government regulation to show you the steps that have been taken to prevent fraud against the Customs and protect the interests of American breeders. The policy of the Government at the present time is to encourage the importation of animals of the highest class, whose value will more than compensate for their competition with the product of American breeders, the object being the adaptation of foreign breeds to our special conditions, or the establishment of American breeds by fusing the imported and native blood, the ultimate end being practical independence of foreign breeders. That this policy is sound does not seem open to question. America has the facilities of soil, climate, feed, and pasture to supply her own demands for breeding stock of all kinds. The quality of her wool, meat, and horses is unrivaled in the world's markets. If the high standard of these products is admitted, you must also admit our possibility to produce breeding stock of equal value.

Now, if we are to hold our own in the world's competition, we must maintain and even raise our standard. This means that the breeding stock which supplies our flocks, herds, and studs must be specially suited to our conditions, and, therefore, must be distinctly American. The door should always be open to let in the best blood lines and for new and desirable species, breeds, and families, but every introduction of this kind shall have to be made with great care and intelligence, especially when we shall have succeeded in developing types peculiarly our own.

The Future Policy.

No. 1 of Cattle, Horses, Sheep, and Hogs Imported for Breeding Purposes.

To obtain a satisfactory understanding of this subject, it is necessary to study the figures showing the number of animals imported for breeding purposes. The earliest year that they were separately enumerated was 1883, and the earliest year that the country of origin was shown was 1884. From 1881 the figures in the table are given for each year and for five-year periods. The imports for hogs are for consumption.

(Continued on page 160.)

A TRAINED NURSE

After Years of Experience, Advises Women in Regard to Their Health.

Mrs. Martha Pohlman of 55 Chester Avenue, Newark, N. J., who is a graduate Nurse from the Blockley Training School, at Philadelphia, and for six years Chief Clinic Nurse at the Philadelphia Hospital, writes the letter printed below. She has the advantage of personal experience, besides her professional education, and what she has to say may be absolutely relied upon.

Many other women are afflicted as she was. They can regain health in the same way. It is prudent to heed such advice from such a source.

Mrs. Pohlman writes:

"I am firmly persuaded, after eight years of experience with Lydia E. Pinkham's Vegetable Compound, that it is the safest and best medicine for any suffering woman to use."

"Immediately after my marriage I found that my health began to fail me. I became weak and pale, with severe bearing-down pains, fearful backaches and frequent dizzyspells. The doctors prescribed for me, yet I did not improve. I would bloat after eating, and frequently become nauseated. I had pains down through my limbs so I could hardly walk. It was as bad a case of female trouble as I have ever known. Lydia E. Pinkham's Vegetable Compound, however, cured me within four months. Since that time I have had occasion to recommend it to a number of patients suffering from all forms of female difficulties, and I find that while it is considered unprofessional to recommend a patent medicine, I can honestly recommend Lydia E. Pinkham's Vegetable Compound, for I have found that it cures female ills, where all other medicine fails. It is a grand medicine for sick women."

Money cannot buy such testimony as this—merit alone can produce such results, and the ablest specialists now agree that Lydia E. Pinkham's Vegetable Compound is the most universally successful remedy for all female diseases known to medicine.

When women are troubled with irregular, suppressed or painful periods, weakness, displacement or ulceration of the female organs, that bearing-down feeling, inflammation, backache, bloating (or flatulence), general debility, indigestion, and nervous prostration, or are beset with such symptoms as dizziness, faintness, lassitude, excita-

bility, irritability, nervousness, sleeplessness, melancholy, "all-gone" and "want-to-be-left-alone" feelings, blues and hopelessness, they should remember there is one tried and true remedy. Lydia E. Pinkham's Vegetable Compound at once removes such troubles.

No other female medicine in the world has received such widespread and unqualified endorsement.

The needless suffering of women from diseases peculiar to their sex is terrible to see. The money which they pay to doctors who do not help them is an enormous waste. The pain is cured and the money is saved by Lydia E. Pinkham's Vegetable Compound.

It is well for women who are ill to write Mrs. Pinkham, at Lynn, Mass. The present Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham, her assistant for many years before her decease, and for twenty-five years since her advice has been freely given to sick women. In her great experience, which covers many years, she has probably had to deal with dozens of cases just like yours. Her advice is strictly confidential.

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fall.



Protected by Block Signals

Block signals are especially important during the winter months. The first railway in America to adopt the absolute block signal in the operation of all trains was the

Chicago, Milwaukee & St. Paul Railway

This railway today has more miles of road operated under block signal rule than any other line.

The Southwest Limited leaves Union Station, Kansas City, 5.55 p. m.; Grand Avenue, 6.07 p. m. Arrives Union Station, 8.20 a. m.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street
KANSAS CITY

Home Departments

CONDUCTED BY RUTH COWGILL.

OPPORTUNITY.
They do me wrong who say I come no more,
When once I knock and fail to find you in;
For every day I stand outside your door,
And bid you awake, and ride to fight and win.

Wait not for precious chances passed away,
Weep not for golden ages on the wane!
Each night I burn the records of the day;
At sunrise every soul is born again.

Laugh like a boy at splendors that have sped,
To vanished joys be blind and deaf and dumb;
My judgments seal the dead past with its dead,
But never blind a moment yet to come.

Though deep in mire, wring not your hands and weep,
I lend my arm to all who say, "I can,"
No shame-faced outcast ever sang so deep
But yet might rise and be again a man!

Dost thou behold thy lost youth all aghast?
Dost reel from righteous retribution's blow?
Then turn from blotted archives of the past,
And find the future's pages white as snow.

Art thou a mourner? Rouse thee from thy spell;
Art thou a sinner? Sins may be forgiven;
Each morning gives thee wings to flee from hell,
Each night a star to guide thy feet to Heaven!

By Walter Maloney.

Familiar Features of the Roadside.*

Mrs. Mary Holsinger Rose.

The public ways of a Nation are vital. Good roads enhance, poor roads retard the wellbeing of a people. This adage has always been known, but not always acted upon.

Mother Rome, having a genius for placing her burdens on the shoulders of other people, did act upon it, and had roads built over 2,000 years ago which have lasted to this day. Twenty-nine military roads centered at Rome, which with their branches had a length of over 50,000 miles. Milestones marked the distances from all parts of the empire to a gilt column in the Roman Forum.

These roads were not easily built nor lightly undertaken. They were pavements of dressed stone blocks, with close joints on a foundation of concrete, which rested on a subfoundation of large, flat stones, the whole construction being three feet thick and from eight to sixteen feet wide. The Romans showed neither adaptability nor economy in their road-building. They built by main strength, and their roads ran in a straight line up hill and down dale. Macadam says: "Their construction was a kind of desperate remedy to which ignorance has had recourse."

In India and Persia there were a few good roads in early times. In the latter country there was built beside the public highway a private road for the ruler, which was kept in better repair, and from which originated the saying, "There is no royal road to learning."

Explorers in Mexico and Peru found excellent roads between the principal towns. One of the military roads of Peru is said to have been nearly 2,000 miles long, with tunnels through the mountains and bridges or ferries over the streams. This road was 20 feet wide and paved with flagstones covered with bitumen.

Working Out the Road Tax.

But no such highway was ever found within the borders of the United States, nor can be even now. Our earliest roads were Indian trails, upon which we are slowly improving. Note the simplicity of the American method of country road-building compared with the Roman. Some day when it is either too wet or too dry to plow at home, the farmer takes his slowest team and goes to work out his tax. He plows up the mud of the gutters, piles it unevenly in the center of the road and calls it "well done." Of course the first heavy rain washes it back to the gutters again. Ruts are familiar features of country roads.

Now, a common road is much simpler to build than a railroad, and we might pay our road tax in money instead of work and employ an engineer to construct our roads. But we, the people,

don't like to pay out the dollars, and we don't intend to make a lot of civil engineers into rivals of Carnegie and Rockefeller. Besides, the old system has its advantages. It furnishes a livelihood for a lot of road overseers who could not make a living any other way and our rural population are never liver-grown.

It has long been a reproach to us that our roads do not compare with those of Europe, but there has been an immense improvement in the last fifteen years. Ours is a big country, and it will take time to build good highways from New York to San Francisco.

The Unsightly Poles.

One of the familiar features of the wayside is the increasing number of telegraph and telephone poles. When the Japanese woke up forty years ago, and began to copy the ways of Western Europe and America, one of their first reforms was to commence cutting the beautiful shrubs or trees which lined their highways, and to plant poles instead after the foreign method. They thought these poles had a religious significance—were some sort of a Shinto emblem, else why should the large, fair, and wise barbarians plant them in such profusion? The resident foreigners protested so vigorously that the desecration was stopped—in Japan. Perhaps some day we shall have all the benefits of telephone or telegraph without the unsightly poles.

Literary and Pictorial Features.

Then there are the literary and pictorial features which so lavishly adorn the highways; fables in black and white which he who runs must read whether he will or no. Here on the right is one. "Geo. B. Peck's the growing store. Every day \$'s saved"—by Geo. B. Peck, of course. I have no \$'s left for him to save, so I turn away. On the left I read, "Poor paint is waste. Buy Devoe's," and straight ahead at the turning is the legend, "X Y Z's Clothing Store." I lift my eyes to the hills and there in gigantic letters is told the marvel and the wonder of Bull Durham. It stands on a pinnacle alone. No tree so brazen as to flutter a leaf before its splendor. The heavens are slow to declare their glory in the face of this glory on earth.

Saddest of all are the likenesses of two eminent men, dead philanthropists, who have suffered a slanderous billboard resurrection. Shame! that Geo. W. Childs is known to the young people of to-day only as a tobacco sign, and the noble sentiment, "I am for men" means nothing but a cheap cigar. George W. Childs hated tobacco, I am told, and fought against its use. There should be a way to protect a man's memory from such defamation. Let the Pete Dailys continue to sing the praises of the weed if you will, but let Geo. W. Childs and Henry George stand for the things they fought for in their life-time.

The Wayside Nuisance.

By the wayside, and near the road I most frequent is a familiar something intangible, unseen, but ever present. No cloud so black and no sky so bright as to dispel this olfactory offense. Its emanations fill the earth and rise to the heavens. You remember the poets thus describe it:

"The pigsty is a monster of such frightful mein
That to be hated need not e'en be seen,
But sniffed too oft, familiar to the smell,
We first endure, then take to it like—jell."

Of the truth in these lines I bear reluctant witness, for with sorrow do I confess that when the bank barometer is low, and the financial sky is black and the storm clouds of adversity threaten the domestic horizon, the head of the family talks of going into the hog business.

Once, in the early days of earth Father Adam called a great family council to give each and every animal a name. "No use to name the hog," said they, "because every one will know what it is, as soon as he sees it, any way." The special beauty of the hog-pen is that every one knows what it is without seeing it. Hogs are useful and hogpens have their places, but that place is not by the roadside where they are a daily offense to hundreds. Some day, just short of the millennium, the

Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—ALL WOOL.

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a LOWELL INGRAIN.

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: LOWELL INGRAINS are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a LOWELL INGRAIN when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a LOWELL INGRAIN.

Manufactured by BIGELOW CARPET CO., New York

public will be protected from the nuisance of slop-fed hogs.

The Unattractive Tangle.

"A weed," says some one, "is a plant out of place." There are many plants out of place along our highways. It is one of the penalties of a fertile soil and a glowing sun that weeds innumerable spring up where the man with the hoe is not. The roadside is an impenetrable jungle with a background of sumac, elder, and buckeye; shrubs beautiful in themselves, but with their graceful outlines lost in the tangle of rank growth. But surely if we can ever forgive lavish nature and careless man it is now. The horseweed, the burdock, and the jimson weed abound, it is true; the mullen, the stinging nettle and the thistle are with us, but the wild morning glories are a-bloom, the dark green of the sarsaparilla vine with its glossy berries covers much that is unsightly; the black-eyed Susies peep out everywhere; the wild asters are in their purple prime; the sunflowers lift their heads reverently to their sun god, and the goldenrod is a golden glory. But when we have acknowledged all the beauty and given thanks for it, the fact remains that miles of tangle does not make an attractive highway. The eye longs for open spaces and green-sward. The brief reign of the autumn flowers does not atone for the summer's neglect. Five months of dry, dusty weeds by the roadside is too big a price for pay for an occasional clump of blossoms in the fall.

Public spirit is aroused in the cities. Immense treasure in money and labor is expended on parks and streets that towns may be good to live in. Can we not cultivate in ourselves and our neighbors a similar civic pride? Let us call the man a benefactor who plants his garden so that it may be a joy to the passer-by as well as to himself. Let us call that man a patriot who cares for the adjacent roadside, who plants trees there, and who, as Elbert Hubbard says, "Makes one blade of grass to grow where jimson weeds grew before."

Politeness.

Good breeding is an accomplishment French people always acquire at home and in childhood; therefore their reputation for being the politest people in the world.

A Frenchman, his wife and a couple of children will observe all the most exquisite social amenities in the privacy of their own vine and fig tree, and the family life presents all the social advantages they require. A French boy of even the humblest parentage does not wait to go out in the world to learn how to offer a woman a chair, give an elderly gentleman his arm, invite you to dine, or discover the topics of conversation that engage your interest. He has lived from his babyhood in an atmosphere of family deference and cheerfully unselfish consideration, and he is charmingly polite by precept and example wherever he may find himself.

Happiness, content and right satisfaction, all doubts answered, all dark places lighted up, heaven begun here—this is the reward of loving God. In this world, tribulation, yes, but good cheer in spite of that.—George Hodges, D. D.

Age of baby, three years. Finding a button off her dress, little Strathie said to his grandfather. "Grandfazzer, me wants a wife to look after my clothes."

"A Kalamazoo Direct to You"

You save from 20% to 40% by buying a Kalamazoo Stove or Range direct from the factory at lowest factory prices. Moreover, you get a stove or range not excelled by any in the world. We guarantee quality under a \$20,000 bank bond.

We Ship On 360 DAYS APPROVAL and We Pay the Freight.

If you do not find the Kalamazoo exactly as represented, the trial does not cost you a cent. It will pay you to investigate.

Send Postal for Catalog No. 189.

All Kalamazos are shipped promptly, blacked, polished and ready for use.

Kalamazoo Stove Co., Mifflin, Kalamazoo, Mich.

All our cook stoves and ranges are fitted with patent oven thermometer which makes baking easy.



The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS.

DRAUGHON'S Business College

Ft. Scott, St. Louis, Kansas City, Oklahoma City and Muskogee. 26 colleges in 15 States. POSITIONS secured or money REFUNDED. Also teach BY MAIL. Catalogue will convince you that Draughton's is THE BEST. Call or send for it.

KANSAS ANTI-LIQUOR SOCIETY
We are distributing free to all who write and inclose a stamp, a prescription for the cure of the liquor habit. It can be given secretly in coffee or food. Also a recipe for the cure of the tobacco habit, that can be given secretly. The only request we make is that you do not sell the recipes, but give free copies to your friends. KANSAS ANTI-LIQUOR SOCIETY, Room 77 Gray Bldg., KANSAS CITY, MO.

E. G. KINLEY, Topeka, Kans.

Manufacturer of and Dealer in CARRIAGES, BUSINESS WAGONS, &c. Buggy Tops Wholesale and Retail. Special Prices on Spring Wagons. Order Work, Repairing, and Rubber Tires.

Repository, 116 West Fifth Street. Factory, 424-426 Jackson Street. Ind. Phone 699.

AGENTS WANTED \$125 a bottle Sarsaparilla for 35¢; best seller; 200 percent profit. Write today for terms. F. B. Greene, 115 Lake St., Chicago.

The Young Folks

THE FELLOW WHO CAN WHISTLE.
The fellow who can whistle when the world is going wrong
Is the fellow who will make the most of life;
No matter what may happen, you will find him brave and strong—
He's the fellow who will conquer in the strife.

The fellow who can whistle when the whole world seems to frown
Is the kind of man to stand the battle's brunt;
He's got the proper metal, and you can not keep him down,
For he's just the sort that's needed at the front.

The fellow who can whistle is the fellow who can work,
With a note of cheer to vanquish plodding care;
His soul is filled with music, and no evil shadows lurk
In his active brain to foster grim despair.

The fellow who can whistle—he is built on nature's plan,
And he cheers his toiling fellow men along;
There is no room for pessimists, but give to us the man
Who can whistle when the world is going wrong.

—Sidney-Warren Mase, in Lippincott's.

Aunt Kate to Katherine.

Chicago, February 7, 1906.

My Dear Niece:—I was invited out to a dinner last week, as I told you. I accepted, and this letter is the direct result of my going.

Who was the wise woman who said, "I can judge the character of a young girl, if I sit down to the same dinner-table with her?" I am not sure that I am prepared to make so sweeping a statement as this, and yet the table manners—be they of the old or young—do indicate the character to some extent.

There were twenty guests present, and we were seated at one long table. It was a delightful dinner and I enjoyed meeting the ladies, most of whom I knew. Among them was a young high-school girl, whom I had heard spoken of as very bright and charming. She was seated just opposite me. Her dress suited her perfectly and she was very pretty.

But my namesake shall not make the mistakes that young girl made, if it is in the power of her aunt to help it. She began by telling a good story and she told it well. Then she told another not so good. That seemed to start her, and she monopolized the conversation at that end of the table. She was the youngest guest present, and it was, to say the least, a lack of tact upon her part.

I was reminded of the answer I heard your small sister Ruth make not long ago, when you asked her why she did not like a certain little girl. "If little girls show off too much, folks get tired of them," she said.

This young girl rested her very pretty bare elbow on the table, as she leaned to talk to the lady next. A moment after I heard her say: "Not olives, thank you. I think them perfectly detestable, and I don't see how anybody can eat them."

Once she reached across her neighbor to secure a salt-shaker, and perhaps she caught the surprise in my eyes; anyway she said, laughing: "You know this is an informal dinner. Mrs. L. said so, when she invited us."

I felt like answering, "Informal does not mean ill bred." And so it went. Without doing anything that was very rude, she did a dozen things that were not good manners at a dinner party—not a dinner at home, for the matter of that.

After I got home, I thought it all out, and I came to this conclusion: Young people—also older people—are not careful enough to use their very best manners three times a day, at their own home tables. And so it is impossible to get into their best manners upon short notice, when invited out to dine. The only safe way, then, is to don one's best manners and keep them on for the people who love us best—those in our own homes. Thoughtfulness of others, tact and politeness at table will then soon become a part of one's self. We will grow to be like the dear old lady whose daughter said to me not long ago, "I can not imagine my mother doing or saying anything unkind or rude. She would not know how."

I remember that you do not like the "don't" lists in a paper; so, my dear, I have not sent you a single "don't"; but perhaps you may discover a few things

to avoid, and my letter will not have failed of its mission.

Your loving

AUNT KATE.

A Hoy's Apiary.

I was a boy when I was master of an apiary, and thirteen when I made my start with a dozen hives. The home was on Lake Champlain, and close by the shore of the lake, and in clover time my father's bees would streak by thousands for the rich fields of Vermont, two miles over the lake. In light breezes or even fairly rough weather they made the passage very well, but Lake Champlain can be mirror-still for days at a time in June, and then the poor honey-seekers could be seen dottling the quiet water by hundreds, many dead, many still struggling, but not one rising after the wetting of her wings. I suppose it was the glare of the still water which confused the little creatures, rather than any weariness, for repeated observation established beyond doubt that if the surface was but slightly rippled, or if the waves were high, the brave voyagers would make their four-mile flight for the tiniest fraction of the contents of one cell of honey, in perfect safety.

Therefore, both for mercy and for profit the apiary was moved a mile and a half back from the lake, the boy of thirteen was placed in charge, and we heard no more of the swarms of dead bees in the water on calm days, and from the basswoods on the craggy sides of Bulwagga Mountain and the clover patches in the scanty farms of "Coote Hill" the descendants of those twelve swarms paid my way in the simple life of a very respectable Vermont college. It is a great thing for a boy to be master of something—or anything. I would rather be Tom Sawyer, the boss of one bedraggled pup of mighty prowess in the imagination of his master, than the son of a man who owned everything in sight, so that his boy could not own anything at all. Thirteen years old—and to see the dozen graceful bee-mansions increase one by one! Twelve colonies, and then your first new swarm, all your own! Thirteen, then two in a day—whoppers, both of them, and it's only May, and Bill Reed, who's been at the business twenty years, hasn't a swarm this year! Fifteen! Sixteen! How they do sing of a warm June night now! Is there any music in all God's earth like the soft roar of the apiary, when every hive "hangs out," and the scent of the ripening nectar makes one extend his nostrils, and breathe, and just breathe? And to be a boy, and to know that in each of those little palaces there is tier on tier of snow-white sections put together by his own hands, filling with the fairest, sweetest honey the earth affords, the nectar of our Northern clover and the basswoods of the hills!—New York Evening Post.

A Dog Which Saves Lives.

Rags is a 4-year-old dog, unkempt and ill looking, but a heroic heart beats in his shaggy breast. Rags has saved more than forty lives. His field of service is the Klondike, where he and his master have wintered for several years. The Philadelphia North American tells of two of the dog's exploits.

In the winter of 1901 a number of men belonging to the Pittsburgh Mining Company were prospecting in Alaska. They lived in a little wooden hut, from which they went out in pairs to explore. They were away beyond any sign of civilization, and the weather was so severe that they endured a good deal of suffering.

One day two of the men, out on an expedition, were caught in a sudden and terrific storm. They started back for camp, but the trail was rapidly covered by the drifting snow. On and on the men plodded, each falling now and again, only to be roused from the death-dealing sleep and hustled on by his companion. At last both sank, and the snow drifted over them.

The men at the camp, alarmed by the non-appearance of their comrades, started out to rescue them. Rags went along, too. Straight as an arrow he followed the trail, and before long a sharp yell told the party that their friends had been found. The two men were completely buried in the snow, and help had not come one moment too soon. This was Rag's first exploit.

At another time he went out as the leader of sixteen dogs which were dragging a rescue team to relieve a party of snow-bound miners. As the team was plodding steadily along, Rags suddenly gave a cry, broke from the traces and bounded away. Thinking he might have found the trail, the party followed, and by the time they had reached him, Rags had dug away

the snow to allow an entombed miner to crawl out.

Enough snow to allow an entombed miner to crawl out.

Rags has saved forty-six lives and made several record-breaking rescue trips. His badge of honor is a gold collar on which is inscribed a list of his deeds.—Ex.

Home Made

Have your cake, muffins, and tea biscuit home-made. They will be fresher, cleaner, more tasty and wholesome.

Royal Baking Powder helps the housewife to produce at home, quickly and economically, fine and tasty cake, the raised hot-biscuit, puddings, the frosted layer-cake, crisp cookies, crullers, crusts and muffins, with which the ready-made food found at the bake-shop or grocery does not compare.

Royal is the greatest of bake-day helps.

ROYAL BAKING POWDER CO., NEW YORK.

enough snow to allow an entombed miner to crawl out.

Rags has saved forty-six lives and made several record-breaking rescue trips. His badge of honor is a gold collar on which is inscribed a list of his deeds.—Ex.

The Little Ones

A DOMESTIC TRAGEDY.

My doll, my doll, my Annabel!
She's really feeling far from well—
Her wig is gone, her eyes are out,
Her legs were left somewhere about,
Her arms were stolen by the pup,
The hens ate all her sawdust up;
So all that's really left of her
Is just her clothes and character!

—Lucy Fitch Perkins.

A Brave Bird.

"Another story!" exclaimed Aunt Julia, as little Eleanor climbed into her lap and laid her curly head contentedly on her aunty's shoulder. "Well, this is the fourth story you have had to-day, so this time it must be a really, truly story, and it happened last year in a pretty little town down East, where your Uncle Charles and I were spending the summer.

"I was sitting on the piazza with my sewing, and your uncle was reading, when all at once the dearest little gray bird, with pale yellow spots on its wings and tail, flew down on the piazza and hopped round in a very friendly way. A few moments later I went into the house to get my scissors, and while there your uncle called to me to look out of the window. There was the dear little bird up on the table, pulling at my work and trying to fly off with it.

"I brought out some ravelings of cloth, bits of cotton wool and thread, and laid them near my work on the table. Very soon down came birdie again, and seemed delighted to find so many nice bits for the nest.

"All that day she flew back and forth with the pieces of string, wool and cotton, often lighting on my chair, and seeming not one bit afraid. The next day she came again, getting better and better acquainted each time, until she hopped into my lap, pecking at my work and picking up any loose threads she could find, and carrying them off to her nest in the tree near by.

"The third day some friends came over to see our new pet, and to watch her, busy at her task of nest-building.

"For a long time after they came birdie watched them from her perch in the tree, but did not offer to fly down near us, and we feared we had frightened her away; but in a little while down she came again, flying on the table, and then into the lap of one of the ladies sitting near.

"Off she went again with the scraps of wool she found there, then back again, perching on the shoulder of a little girl, and pecking at her hair rib-

THE Cheapest Farm Lands

In the United States today, soil, climate, markets, transportation facilities, and all considered.

ARE SOUTHERN LANDS.

They are the best and most desirable in the country for the truck and fruit grower, the stock raiser, the dairyman and general farmer. Let us tell you more about them. The Southern Field and other publications upon request.

Home-seekers' Excursions on the first and third Tuesdays of each month.

M. V. RICHARDS,
Land and Industrial Agent,
Southern Railway and Mobile & Ohio railroad, Washington, D. C.

CHAS. S. CHASE,
622 Chemical Bldg., St. Louis, Mo.
M. A. HAYS,
225 Dearborn St., Chicago, Ill.
Agents Land and Industrial Dept

NO ONE WHO VISITS COLORADO CAN AFFORD TO MISS A TRIP OVER THE

SWITZERLAND TRAIL OF AMERICA,

The Colorado and Northwestern R. R.
DENVER to Eldora and Ward

Takes you to the CONTINENTAL DIVIDE; to the land of perpetual snow and through the great Gold, Silver and Tungsten Mining Camps of Northwestern COLORADO. Challenges the world for Scenic Grandeur and Beauty.

Leave DENVER (Union Depot)..... 8:00 a. m.
Returning, arrive..... 5:45 p. m.

Write,
L. R. FORD,
General Passenger Agent,
Boulder, Colorado.

GOOD ROADS How to Acquire Them

Every citizen should read it. Send two 2-cent postage to

JOHN L. SCHILLING,
1711 Lawrence Ave., Toledo, Ohio

T If you want to know all about
E TEXAS and TEXAS E
X lands write for free sample X
A copies of the TEXAS STOCKMAN A
S & FARMER, San Antonio, Tex. S

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address,

KANSAS FARMER CO.,
Topeka, Kans.

bon, evidently thinking it would make a fine, soft lining for her nest.

"Next she lighted on Uncle Charles' arm, and tried to pull his handkerchief out of his pocket. We wanted very much to laugh at the dear little thing, she was so cunning and amusing, but we kept very quiet, fearing we should frighten her away."

"She hopped about the piazza for some time, then finally flew back to her nest, which by this time I think must have been finished, for although we often saw her flying about near the house, she never came on to the piazza again."—Mary W. Carpenter in Youth's Companion.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. F. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Osboroue, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literature Club, Ford, Ford County (1903).
Subean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthouy, Harper County.
Taka Embroidery Club, Madison, Greenwood County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1903).
Prentis Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russel, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

Art and Life.

I. Art in relation to life.
II. The preservation of art—and civilization.

III. The influence of art upon character.

I. Art means anything produced by the mind and hand of man, and includes fine art, the industrial or liberal arts, and is so closely associated with life that they can not be thought of separately. This is a broad subject and may be profitable to the writer of this paper and to the hearer. It may be made very practicable and applied to everyday life.

II. This subject may be used in a broad way by giving a brief history of the growth and development of the arts—both fine and industrial—showing the progress of the same with the march of civilization as they have gone hand in hand together.

III. Art is a beautiful language that speaks to the soul of man and yields an influence for good or evil. Some thoughts and ideas are better expressed in that way than any other. The importance of the artistic home surroundings, and their effect upon the children might be presented in such a way as to be practicable and helpful.

Possibilities of the Club.

While the club is a benefit to the woman by making her healthier, wiser, and better, it may also be a means of accomplishing great things in a community. No true woman, or number of women can long enjoy the blessings which it brings without a desire for the betterment of somebody else. An organization of women can do much to improve the morals and manners of the young by elevating the standard of living.

The possibilities of the club for the improvement of the neighborhood are many. In this respect I refer you to the article in this issue of the Kansas Farmer on "The Familiar Features by the Roadside," which reveals some of the needs. By concerted action on the part of a body of energetic, in-earnest women they can do wonders.

If each farmer sees to it that his own premises and wayside is well-kept, and that no unsightly advertisements are allowed on them, that the profitable but

objectionable hog be relegated to an obscure, out-of-the-way place, and unsightly places be covered by evergreens how long will it take to transform the appearance of a locality? And this can be done by agitation at home and in the club. Woman is often the motive power in the world of action and many great achievements are due to her influence and advice.

[The following, by Mrs. Winslow in the Delineator, will apply to the country as well as to town.]

The fact is that club women have come to realize how much may be done for the Nation by beginning right in their own kitchens. The farmer who succeeds nowadays gives a great deal of time and study to the feeding of his flocks and herds. He would not expect to make a success, for instance, of chicken-raising unless he fed his hens properly with good, nourishing food. Shall the housekeeper do less? Every club should devote at least one meeting a year to the kitchen, its location, furnishing and care. Another meeting should be devoted to the study of proper foods; and here would come in some exhaustive work on the pure-food question. The intelligent club woman has found that many things must come into consideration in planning the meals of her household. She has the problem of making the tastes of her family and the limitations of her purse correspond to the science of nutrition and economy. She must learn to adapt the food of the family to that intricate machine, the human body, and to provide for it such fare as will give energy and life with as little waste and as little friction as possible. The "simple life" has been talked to a tiresome end, but a more simple home-life is what every housekeeper should aim for. Clean homes and pure food constitute a problem that comes close to the club woman's heart, and in every town the woman's club which is up-to-date is taking the lead in studying it. It would be an excellent thing for the home as well as for the club question if all through the country the clubs would make an exhibit next spring of the best foods. Dietary standards, pure food and similar topics should all be illustrated; and the exhibit should be thrown open to the public, thus not only educating the immediate locality, but proving the practical benefit a club may be to a town.

TESTED RECEIPTS.

Lizzie's Cookies.

1½ cups sugar, 1 cup butter (small), ½ cup molasses, 3 eggs, 1 teaspoon soda, 1 cup raisins, 1 cup currants, 1 teaspoon ginger, 1 teaspoon cinnamon, 1 teaspoon allspice, sufficient flour to roll out as soft as can be cut.—Mrs. W. A. Taylor, Sterling.

Fruit Cake.

1 cup butter, 2 cups sugar, 1 cup sour milk, 4 eggs, heaping teaspoon soda, 2 pounds raisins, 1 pound currants, ¼ pound citrons, 2 oranges, 1 lemon, 1 cup New Orleans molasses, teaspoon nutmeg, 1 teaspoon cinnamon, 1 teaspoon cloves, flour to make it rather stiff. Bake slowly for two hours. A few dates and figs improve it.—Mrs. W. A. Taylor.

Fruit Salad.

1 pint nice mellow apples, cut in dice shape, 1 pint celery, 1 cup English walnuts. Dressing for the above—yolks of 2 eggs, 8 tablespoons butter, sugar, red pepper to taste, pinch of salt, vinegar to taste, whipped cream. Have tried this and I know 'tis fine.

Ginger Bread.

½ cup sugar, ½ cup butter, 1 cup molasses, cup boiling water, 2½ cups of flour before sifted, 2 eggs, 2 teaspoons soda, teaspoon ginger, a pinch of salt.—Mathilda Johnson, Santa Clara, Cal.

Cream Omelet.

Put a tablespoon of butter and a tablespoon of flour together into a saucepan, blending together as the butter melts, then add gradually a half cup of milk, and season with salt and pepper. When thick take it from the fire and let it cool, while you beat the yolks of 2 eggs which add slowly to cream sauce, and lastly fold in lightly the whites whipped until stiff. Have some melted butter in your hot pan, pour in the mixture and cook on top of a hot stove about two minutes or till stiff; then set in the oven a minute



SIMPSON-EDDYSTONE Black & Whites

Fast color that is absolutely fast means much to the life of a dress. This combined with extraordinary quality, makes the pretty materials extremely durable.

Ask your dealer for
Simpson-Eddystone Black & Whites.
Three generations of Simpons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

- Bookkeeping
- Shorthand
- Civil Service
- Telegraphy
- Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

till the top is a dainty brown. Fold over and send to table immediately.—Katharine Lawrence, an Instructor in Cooking, Philadelphia.

Good Cookies.

Two cups white sugar, 2 cups lard, 2 eggs, 2 tablespoons ammonia dissolved in 1 pint sweet milk; flavor to suit taste.—Mrs. M. R. Hanenkratt, Tillamook, Ore.

Escalloped Salmon.

Take a can of salmon and mash it up, then butter your bake-dish, put in a layer of crackers, then salmon and then crackers and so on until you use all your salmon; salt, pepper and dot with butter and pour on enough milk to moisten the crackers and bake until a nice brown.—Mrs. Myra Bowker, Connellsville, Pa.

Baked Apples.

Peel and quarter enough apples to cover bottom of bake pan, have ready a dressing of ½ cup of sugar, 1½ tablespoons cornstarch, butter size of walnut, pint boiling water; stir and boil until thick, flavor with vanilla and pour over apples and bake.—Mrs. Myra Bowker, Connellsville, Pa.

Ginger Cake.

Put 2 cups baking molasses in a bowl, stir in it 1 cup melted lard, 2 teaspoons soda, 2 of ginger, 1 of salt, 1 cup hot water; stir all well and add enough flour to make a soft dough; roll out and bake.—Mrs. Myra Bowker, Connellsville, Pa.

Wanted It to Drop.

A belated traveler asked for a room at a hotel, and was told there was only a small one left and it was next that of a regular boarder, who was a nervous crank, who raised Cain if he was disturbed. He was cautioned to be quiet as possible on retiring, and promised to do his best. He entered the room, closed the door without making a sound and proceeded to disrobe. He got along fine until removing his boots, when one slipped inadvertently from his hand and fell with a sickening thud on the floor. He waited a moment to note the result, but apparently his neighbor was undisturbed, as there was not a sound. He had retired quite a few minutes, and was just dozing off when there came an awful pounding at his door.

"Hello! what's the matter?" he cried out.

From the other side of the door came in irritable, testy tones, "Confound you! Why don't you let that other boot drop? I have been waiting twenty minutes for it."

Give and Take.

The other day the head of a boarding-school noticed one of the boys wiping his knife on the table-cloth, and pounced on him at once.

"Is that what you do at home?" he asked indignantly.

"Oh, no," answered the boy quickly, "we have clean knives."—Lippincott's.

LOW

ONE-WAY RATES

VIA

UNION PACIFIC

FROM

TOPEKA EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00

to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00

to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00

to Portland, Astoria, Tacoma and Seattle.

\$25.00

to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50

to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00

to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00

to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

MACHINE OIL

\$3.50 A BARREL

You will find it a better machine oil than anything you have been buying for 35 cents to 45 cents per gallon. Premium Oil is a natural oil, greenish black in color. There is no made oil that is superior to Premium Oil for engines, shafting, shops, elevators, thrashing machines and farm machinery. It will not GUM, has good body, is not affected by hot and cold weather as most oils are. If a farmer, you say you won't need as much as a barrel. Get your neighbor to take half of it. But remember \$3.50 for a 50-gallon barrel, and the empty barrel is worth at least one dollar; gives you oil at less than 6 cents per gallon at your railroad station. If within 300 miles in Kansas freight will not be over 75 cents per barrel. Sample sent on request.

T. C. DAVIS, Benedict, Kans.

Benedict, Kans. August 26, 1905.
I have this day sold my interest in K. C. Dailey & Co. to T. C. Davis, who will hereafter conduct the business in his name. Signed, K. C. DAILEY.

Asthma

Climates wear out. Smoke, Sprays and "Specifics" relieve only temporarily; they cannot cure. Our CONSTITUTIONAL treatment, founded 1883, permanently eliminates the CAUSE of Asthma and Hay Fever, so that nothing brings back the old symptoms or attacks. Write for B.
L. containing reports of many illustrative cases at have STATED CURED for years. Mailed FREE. Write P. HAROLD HAYES, Buffalo, N. Y.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas.

KANSAS IMPROVED STOCK-BREEDERS' ASSOCIATION SIXTEENTH ANNUAL MEETING.

(Continued from page 155.)
tion only; the other figures show the imports which were again exported, but this number is small and of little consequence. The figures for imports of hogs for 1905 have not been issued as yet.

Now, taken with our observation of the condition in the show-rings, do not these figures show that the importations of cattle, sheep, and hogs have been made more nearly in accord with our traditional policy in these matters than have those of horses? At the present time it is probably true that one can buy American-bred Herefords, Jerseys, Holsteins, and Berkshires that

TABLE I.

Imports of Cattle, Horses, Sheep, and Wine, into the United States, for Breeding Purposes, from 1883 to 1905 Inclusive.

Years ending June 30.	Cattle			Horses		
	Number	Value	Average Value	Number	Value	Average Value
1883 (*)	21,650	\$1,138,804	\$52.60	5,594	\$1,653,334	\$295.55
1884.	41,021	2,309,950	\$56.31	18,271	\$2,212,591	\$121.10
1885.	26,343	1,176,717	44.67	18,521	1,920,887	103.71
1886.	25,301	681,631	26.94	21,062	2,320,768	110.19
1887.	14,355	412,336	28.70	17,650	2,408,679	136.47
1888.	6,866	206,095	30.02	10,378	2,720,704	262.16
5 yrs. 1884-1888.	113,895	\$4,786,729	\$42.03	85,882	\$11,583,629	\$134.88
Average.	22,779	957,316	.....	17,176	2,316,726	.....
1889.	4,440	\$152,582	\$34.37	9,930	\$2,709,887	\$272.90
1890.	3,932	72,831	18.52	10,868	2,937,882	270.32
1891.	2,740	49,326	18.00	6,444	2,009,155	311.79
1892.	132	27,077	205.13	3,312	1,307,587	394.80
1893.	174	21,024	120.83	2,704	1,047,541	387.40
5 yrs. 1889-1893.	11,418	\$322,840	\$28.27	33,258	\$10,012,052	\$301.04
Average.	2,284	64,568	.....	6,652	2,002,410	.....
1894.	312	\$5,349	\$17.14	1,516	836,157	\$551.55
1895.	14,956	99,104	7.33	1,265	417,664	330.17
1896.	734	15,091	20.56	1,070	210,081	196.34
1897.	204	24,360	119.41	699	97,058	138.85
1898.	577	76,631	132.81	800	145,456	181.82
5 yrs. 1894-1898.	16,783	\$220,535	\$13.14	5,350	\$1,706,416	\$318.56
Average.	3,357	44,107	.....	1,070	341,283	.....
1899.	624	\$95,353	\$152.81	1,067	\$296,252	\$277.65
1900.	1,045	202,615	193.89	1,284	357,272	278.25
1901.	1,249	273,728	219.16	1,910	714,623	374.15
1902.	1,928	375,096	194.55	2,944	1,273,607	432.61
1903.	1,481	225,875	152.52	2,803	1,191,611	425.12
5 yrs. 1899-1903.	6,327	\$1,172,667	\$185.34	10,008	\$3,833,365	\$383.03
Average.	1,265	234,533	.....	2,002	766,673	.....
1904.	684	\$79,986	\$116.94	2,634	\$1,090,596	\$414.04
1905.	2,314	93,084	40.22	2,853	1,169,011	109.75

*The earliest year in which they were "separately stated."

Years ending June 30.	Sheep			Swine (t)		
	Number	Value	Average Value	Number	Value	Average Value
1883.	5,733	\$121,480	\$21.19	222	\$5,096	\$22.95
1884.	4,427	\$74,558	\$16.84	283	\$8,481	\$29.97
1885.	5,492	37,257	6.78	342	7,198	21.05
1886.	31,796	56,741	1.78	243	6,241	25.68
1887.	28,547	57,935	2.03	160	2,298	14.36
1888.	18,866	80,884	4.29	307	3,363	10.95
5 yrs. 1884-1888.	89,128	\$307,375	\$3.45	1,335	\$27,581	\$20.66
Average.	17,826	61,475	.....	267	5,516	.....
1889.	5,926	\$69,824	\$11.78	298	\$5,007	\$16.80
1890.	16,303	118,444	7.27	239	5,194	21.73
1891.	9,606	127,221	13.24	49	1,823	37.20
1892.	4,316	112,134	25.98	18	351	19.50
1893.	4,932	111,197	22.55	19	630	33.16
5 yrs. 1889-1893.	41,083	\$538,820	\$13.12	623	\$13,005	\$20.87
Average.	8,217	107,764	.....	125	2,601	.....
1894.	2,537	\$63,022	\$24.84	44	\$1,533	\$34.84
1895.	1,942	30,885	15.90	76	3,578	47.08
1896.	3,950	42,848	10.85	68	2,840	41.76
1897.	2,382	32,640	13.70	85	2,932	34.49
1898.	3,047	42,805	14.05	80	1,030	12.88
5 yrs. 1894-1898.	13,858	\$212,200	\$15.31	353	\$11,913	\$33.75
Average.	2,772	42,440	.....	71	2,383	.....
1899.	2,396	\$46,132	\$19.25	94	\$2,823	\$30.03
1900.	2,427	48,324	19.91	42	1,002	23.86
1901.	2,032	48,989	24.11	178	6,249	35.11
1902.	2,059	46,663	22.66	149	2,764	18.55
1903.	1,737	38,037	21.90	315	7,818	24.82
5 yrs. 1899-1903.	10,651	\$228,145	\$21.42	778	\$20,656	\$26.55
Average.	2,130	45,629	.....	156	4,131	.....
1904.	1,253	\$23,298	\$18.59	191	\$8,392	\$43.94
1905.	2,200	45,319	20.60	...	.....	.....

*Imports for consumption.

A little study of this table shows that the importing business is only from one-tenth to one-eighth as extensive as it was twenty years ago. At the present time, more horses are imported than cattle, but for the five-year period 1899-1903, more sheep were imported than horses, but the number was continually decreasing. For this period, the average annual importation was cattle 1,265, horses 2,002, sheep 2,120, swine 156. For the year 1904, the number of cattle, horses and sheep imported was, cattle 684, horses 2,634, sheep 1,253, swine 191, and for 1905, cattle 2,314, horses 2,853, sheep 2,200. The largest number of horses come from France, with British North America second, and the United Kingdom third. The largest number of cattle and sheep come from British North America, with the United Kingdom second. Swine importations have not been reported by countries.

There appears to be a difference here between the condition in the horse importing trade at the present time and that of other animals. Comparing the five-year period 1899-1903 with the one immediately preceding it, it will be seen that there was an average annual decrease of more than half in cattle and a slight decrease in sheep, but an increase of nearly twice as much in horses. The increase in horse importations has since been maintained and cattle and sheep showed a decrease in 1904, but an increase in 1905, not yet equalling horses, however.

are better for our conditions than the best that is imported, and it will not be long before the same can be said of the Shorthorn, Aberdeen-Angus, Galloway, and other breeds.

The Stallion Trade.

Although the figures do not show it, the great majority of the horses imported for breeding-purposes from across the seas are drafters. This trade from Europe, although bringing us the best horses imported, is the one American breeders have most cause to fear.

Now we have been importing draft-horses from Europe for at least thirty years in large numbers, but the first notable importation dates back to the coming of old Louis Napoleon in 1851. Theoretically, I presume, the same conditions hold here as for the importation of other classes of stock, but, practically speaking, instead of being developed so as to establish the breeds rapidly in the United States, the business has become a stallion trade, handled by men "who rarely breed, own, or import a female."

I am fully aware that this rapidly developed trade really dates back but eight years, that it is due largely to the present tremendous local demand for draft-horses for business-purposes, and that the work that was accomplished before the financial depression of 1893-97 was almost destroyed by the stampede of farmers at that time to get rid of their mares, but, gentlemen, "the

best is imported, and it will not be long before the same can be said of the Shorthorn, Aberdeen-Angus, Galloway, and other breeds.

I am fully aware that this rapidly developed trade really dates back but eight years, that it is due largely to the present tremendous local demand for draft-horses for business-purposes, and that the work that was accomplished before the financial depression of 1893-97 was almost destroyed by the stampede of farmers at that time to get rid of their mares, but, gentlemen, "the

best is imported, and it will not be long before the same can be said of the Shorthorn, Aberdeen-Angus, Galloway, and other breeds.

I am fully aware that this rapidly developed trade really dates back but eight years, that it is due largely to the present tremendous local demand for draft-horses for business-purposes, and that the work that was accomplished before the financial depression of 1893-97 was almost destroyed by the stampede of farmers at that time to get rid of their mares, but, gentlemen, "the

M. S. BABCOCK'S Hot Shot, Harmonizer Sale

OF

Poland-China Bred Sows

AT

Nortonville, Kansas, February 20, '06

70 HEAD

Including sows sired by Corrector, Chief Perfection 2d, Mischief Maker and other great boars bred to Harmonizer, who is producing as great a per cent of the big, growthy, strictly fancy kind as any living boar. Harmonizer and Meddler bred to Hot Shot, the great under a year boar who the good breeder and judge, E. E. Axline, placed at the head of the under year class in the Kansas fairs, 1905. The breeding and individuality of these gilts mated with this great hog should produce future winners in abundance. Sale in pavilion on the farm where every one may be comfortable and a cordial invitation is extended to all to attend whether a prospective purchaser or not. Catalogue for the asking. Drop a postal giving your address that we may send you one.

M. S. BABCOCK,

Nortonville, Kansas

Auctioneers: Jas. W. Sparks, John D. Snyder, John Daum.

O. A. Simmons, Clerk.

GRAND PERFECTION BROOD SOW SALE

Ottawa, Kans., February 10, 1906

in Heated Sale Pavilion

55 Selected Sows and Gilts 55

One by Keep On, bred to Top Chief; one by Corrector out of Runaway Girl, bred to Perfection I Know (sire of Lady Lucile, grand champion sow at the World's Fair); one by Corrector 2d bred to Perfection E. H., first prize at Iowa State Fair 1905; Sunshine 100 bred to Top Roller, and others by Chief Perfection 2d, Perfection E. L., Missouri's Black Perfection, Black Chief Perfection, Grand Chief, Lamplighter, Perfection Now, Black Sunshine, D's Ideal Sunshine, Wonder Sunshine (who will go in the sale), Truant Boy, Chief Perfection 3d, U. C. Perfection, Statesmen, Diamond Dust, M's Keep On, etc., bred to Grand Perfection.

Besides the good boar, Wonder Sunshine, we will sell a choice pig by Dietrich's Darkness, and one by the great Keep On. Who will be the fortunate breeder to land this, one of the very last of the get of Keep On to be sold?

Send bids to the auctioneers, Frank Howard, or George Cantrall, care Dietrich & Spaulding, Ottawa, Kans.

For catalogues, write to

DIETRICH & SPAULDING, Richmond, Kans.

AUCTIONEERS—James W. Sparks, John D. Snyder, Hall

present system is an anomaly." The country must have drafters, and to get them we can not always rely on foreign-bred stallions. We must have mares. We must breed our own stallions.

Undoubtedly the draft-horse business confronted a peculiar situation when it began to revive in 1897. An emergency was to be met and met quickly. A supply of breeding stallions had to be obtained and a trade developed. But let me ask you candidly, has this trade been developed along the right lines? If we sold our draft-mares during the depression, would not the logical proceeding have been to import more mares than stallions so as to establish a supply of stallions of our own breeding?

I have prepared a little table showing the number of horses imported from France, the United Kingdom, Belgium, and Germany since the year the trade reached its lowest ebb, 1897.

TABLE II.

Horses Imported into the United States for Breeding Purposes, from France, the United Kingdom, Belgium, and Germany, for the Years 1897 to 1904, Inclusive.

Year.	France.	United Kingdom.	Belgium.	Germany.
1897				
Number.	16	16	19	
Value.	\$20,754.00		\$6,260.00	
Average value.	1,297.12		329.47	
1898				
Number.	28	35	14	
Value.	\$15,054.00	\$5,540.00	12,138.00	
Average value.	537.64	1,701.14	867.00	
1899				
Number.	118	143	7	29
Value.	62,635.00	155,275.00	1,862.00	19,433.00
Average value.	530.81	1,085.87	266.00	670.10
1900				
Number.	349	176	32	41
Value.	149,914.00	118,930.00	14,306.00	16,481.00
Average value.	429.55	675.74	447.06	401.98
1901				
Number.	492	499	90	121
Value.	280,321.00	268,257.00	39,034.00	49,612.00
Average value.	569.76	537.59	433.71	410.02
1902				
Number.	1,206	592	163	137
Value.	592,451.00	422,394.00	76,789.00	53,269.00
Average value.	491.25	713.50	471.10	388.82
1903				
Number.	1,142	594	122	232
Value.	545,089.00	338,663.00	62,517.00	96,152.00
Average value.	477.31	570.14	512.43	414.45
1904				
Number.	919	479	308	281
Value.	446,128.00	305,692.00	141,222.00	102,446.00
Average value.	485.45	638.19	458.51	364.57

Here are about 2,000 horses coming to us annually from four countries, probably three-fourths of which are stallions. Compared with that for cattle and sheep, this trade bears a much more important relation to the horse industry of the country than the figures indicate, on account of the fact that horses are fewer in number and the registered and pure-bred horses, particularly, smaller. It is worthy of consideration how long this trade will continue and where it will end. The farms of France have been drawn upon until the breeders there are becoming anxious for the permanence of their studs, and importers are turning to Belgium as these figures and our stock shows bear witness. In the European breeding establishment the importer has found a goose which lays a golden egg. Is he not systematically killing it?

Inequalities in Registration Methods.

The large preponderance of stallions in this trade is not the only serious condition. The studbooks of the United States are generally closed to horses whose sires and dams are not registered in the stud-books of America or those of Europe. Now, if the standards of registration were the same in both cases, no one could complain; it would be a straight case of competition, with open chances to all. The European stud-books, however, especially those on the continent, do not regard pedigree of the same importance as we do here. The individuality of a horse, rather than his breeding, decides whether he shall be registered, this usually being passed upon by a board of inspectors. Now this inspection system has much in it that is commendable, and our stud-books might adopt modifications of it to advantage. If horses must pass a rigid inspection before being admitted to registry, the result on the breed will be the same as the result on an army of a rigid physical examination of recruits. The practical workings of the system, however, make possible the registration of horses concerning whose breeding there is little accurate information, and it is easy to see the disadvantage under which an American breeder works when he tries to sell his horses in competition with them. The Government provides a certain amount of protection against these horses by requiring the pedigree certificates of imported animals to show not less than two generations of descent from registered ancestors, but it is only within the past two years that the importation of horses has been stopped whose pedigrees were short on the dam's side in the second generation; the second dam showed what ap-

peared to be a bona fide registration and the certificate passed the Custom officers without detection, but reference to the stud-book showed that the data were taken from the registration of the first dam and that nothing was really known of the maternal descent beyond this point, except the name and owner of the second dam, and, occasionally, her sire. The evasion was explained to the Treasury Department and is now impossible. In other words, up to two years ago, two-top crosses were coming in duty-free and being sold in competition with home-bred stock, which never has been eligible on less than a five-top cross; and now a horse with a three-top cross can enter without restriction. Now let us be perfectly candid and frank. The fact that a three-top cross can enter our ports free, seems to indicate at first sight that the Government is not doing its duty towards American breeders; but if the Government were to revise the

horses by the methods of the confidence man or the agent for fruit-trees and lightning rods. It is reassuring that only a small number of the horsemen of the country are in this class, but it is a matter of regret that some of them are not only importers but pose as breeders as well. That they are able to do business at all is due to their shrewdness and consummate nerve, the credulity of the public, and the difficulty to convict men in the courts of fraudulent pedigree manipulation.

These men generally use the "company" system of selling horses as the most convenient means to dispose of their stock. Now the company system is an institution and is pretty well fixed. Practically all draft-horse handlers use it, but a great many do so not from choice but from compulsion. You are probably far more familiar with it than I. You know the wiles of the agent and his plausible arguments. A common plan is for an agent to go into a community and get a leading farmer to assist him in the organization of a company for the consideration of a share of stock. The shares are represented by negotiable notes, which are discounted at the bank when the company is finally organized, and the bank collects. The price paid for the horse must include, besides the profit to the owner, the expenses and commission of the agent and the discount on the notes. At its best, the system is expensive; purchase direct from the firm would give a price three-fourths or one-half that paid under the company plan. Generally speaking, however, the system gives almost unlimited opportunities for fraud, for this reason: Under the law, a firm is responsible for the acts of its agent only when he acts within the limits of his authority. Therefore an unscrupulous agent for an unscrupulous stallion-owner can promise and represent almost anything to bring about a sale, and if fraud is perpetrated, the purchaser has no recourse. The agent is a migratory being, and hard to catch, while the employer puts on a sanctimonious air and retires behind the excuse that his agent "exceeded his authority." Most of these agents are loyal, and loyalty is a term capable of a very wide range of definition. Their profits depend upon their ability to make sales, and the results of the system are not really surprising. Even an honest firm may have dishonest agents and in their desire to extend business, may condone the actions of an agent if he is a hustler and loyal, and in the event of an agent exceeding his authority, the employer's temptation to avoid his moral obligation is certainly great.

It is gratifying to note that many horsemen condemn this system without mercy, even though they may use it. As long as horses must be sold and competition is keen, and the buyers will not seek the sellers, the system will probably prevail. It is one of the regrettable features of the speculative side of the horse business, and the only chance for its end lies in the hope that the public will become educated to its wastefulness and its possibilities for fraud.

This subject can not be passed without mention of the possibilities of the studbook associations to eliminate dishonesty from the horse business of the country. These organizations constitute the backbone of the industry. As a rule, they have honest boards of directors and honest officers, and are managed competently. They possess a power greater even than that of the law to check the machinations of dishonest importers and breeders. By ostracizing men who continually persist in crooked work, and by the adoption of improved methods of studbook publication, they can put the business on the highest plane.

Time will not permit an elaborate discussion of this phase of the subject, but among the features whose adoption would be desirable, are the publication of a studbook volume annually, rules requiring the report of all deaths and transfers, and the publication in the studbooks of the progeny record of mares and stallions. Some of these features have already been tried without success, but they have much of merit and should not be discarded lightly.

Suggestions Regarding Future Government Policy.

In conclusion let us consider briefly how far the present policy of the Government regarding the importation of horses for breeding-purposes is responsible for these conditions, and whether there is any possibility that changes in this policy may tend to remedy them. There seems little reason to believe that we will ever depart from the idea that the object of our policy should be the establishment of the breeds as soon

regulations so that the conditions would be more nearly equal, and were to require more than two generations of registered ancestors, or require certified foreign stud-books to close their books to "woods-bred" stock, importations would stop at once. Importers are agreed that in many cases the present regulations act as a positive hardship towards them. They are frequently compelled to pass by some of the best horses presented for sale, because their pedigrees are short in the second generation. Yet these horses are of outstanding merit and good judges say that they could often be imported to advantage. It may be that the European system of registration is more efficient than ours, but at all events, there is a condition here which can not be passed by lightly. We are not yet able to dispense with importations but a more equitable adjustment would seem to be desirable if practicable.

Speculation in Horse Imports.

The presence of the speculator in the horse-importing business is one that is worthy the most serious consideration. Excepting his predilection towards stallions, I have no criticism to make against the honest importer who buys the best horses obtainable and conscientiously strives to give value received. He deserves praise for his energy, good business methods, and farsightedness, but the man is beneath contempt who is in the business solely for the money he can get out of it, who buys without regard to individual merit, soundness, or pedigree, and sells his

CONGO ROOFING

Pliable, elastic, light, waterproof, acid proof, durable, attractive in appearance, are a few of the good things about Congo Ready Roofing.

Good all through.
Get a sample—test it. Judge for yourself. We will send you a small piece and Booklet for the asking.

BUCHANAN-FOSTER CO.
448 Chesnut Street, Philadelphia



KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. **Niquette Bros., Salina, Kansas.**

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

If you have farms, ranches, or city properties for sale, or trade anywhere in the State, we would like to have you list the same with us by sending a thorough description together with lowest prices and best terms. We have a fine list of city properties in Topeka and farms around the city, some for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS,
116 E. Fifth St.,
Topeka, Kans.

Holton Real Estate and Loan Co.

Holton, Kansas,

Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.
Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
819 Wainwright, St. Louis.

H. C. BOWMAN,
SHAWNEE COUNTY FARMS.
TOPEKA RESIDENCE AND MERCANTILE PROPERTY.
VACANT LOTS.
TEXAS RANCH LANDS.
42 Columbian Bldg., Topeka, Kans.

8,000 ACRES

Wheat and Alfalfa Land in Logan and Wallace.

These lands are prime No. 1 land, selected, smooth, well grassed and well watered. Price \$4 to \$6 per acre, part cash, and long time for balance.

Chas. A. Wilbur, 111 W. 6th St., Topeka, Kans

S. M. WOOD & CO.

REAL ESTATE, RENTALS, LOANS.
Buy, Sell, or Exchange Wild Lands,
Ranches, Farms, City, Property,
Stock or Merchandise. Call or
Write Us.

TOPEKA, KAN. 534 KANSAS AVE.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

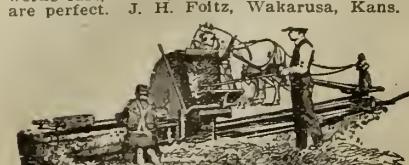
KANSAS, NEBRASKA AND COLORADO LAND FOR SALE.

250 Atchison, Brown and Jefferson County farms for sale at reasonable prices. Write me for full information.

Wm. Dunkel, agent, Muscotah, Kans.

FINE STOCK FARM FOR SALE—640 acres, one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price, \$37.50 per acre. Easy terms. Address **WILSON & NEISWANGER,** 116 W. 6th St., Topeka, Kans.

I am very well pleased with the press as it works fast, is easy on the team and the hales are perfect. J. H. Foltz, Wakarusa, Kans.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1064 Jefferson St., Topeka, Kansas.

as possible on our soil or their adaptation to our conditions.

Many breeders, however, believe that the present tariff laws act as a positive discrimination against American-bred stock, and this sentiment has found voice in a more or less tangible desire for the withdrawal of the duty-free privilege. Some breeders urge that if the regular duty were imposed, more care would be exercised in buying and only the best could be imported. This idea was expressed officially by the American Shorthorn Breeders' Association when it imposed a registration fee of \$100 on all animals imported from foreign countries, except those from Canada. The rule met with violent opposition at the time of its passage, but its operation has shown that it is a wise rule and its repeal is unlikely.

The complete withdrawal of the duty-free privilege, without the present restrictions regarding pedigree and registration, would be undesirable, for the reason that short-bred animals recorded in European books of record would not be kept out. As it is at present, the importer does not bring in such animals, the duty preventing him, although he could do so if he wished by paying the duty and thus avoiding the scrutiny of his pedigree certificates.

A more reasonable plan which has much of merit, is that a duty be placed on males, the importation of females of approved pedigree being permitted without duty. This would give a very desirable impetus to the importation of mares. If this plan were adopted, it would seem desirable to require the importer to state whether his animals were intended for breeding purposes, and to have the present pedigree restrictions apply to breeding males as well as females.

A further restriction that has been suggested is to have all mares and stallions imported inspected by veterinarians for unsoundness, and refused admission if found unsound. There is little doubt that many unsound horses are imported, but the Government has no authority to reject them, the law requiring sanitary inspection only.

That there is a necessity for the establishment of the breeds of horses in this country, especially drafters, no one can doubt, and its possibility seems equally evident. It requires more than skill at a horse trade; it demands knowledge of pedigrees, heredity, and faith in one's self and in horse-flesh. The problems that confront the horsemen of the country must be solved, and one can not doubt that they will be. Sentiment must play a minor part; we must buy the best where we can find it, use it intelligently, and await results. A splendid opportunity exists here for the constructive breeder, the man who will apply ability, perseverance, and courage to the problem.

DISCUSSION.

President Potter: I think, gentlemen, you have listened to one of the greatest lessons this morning that we have had presented.

Mr. Avery: This duty on animals is a question I have personally known to have come up before the Percheron Society of America, and it has a number of very strong advocates in the membership and members of board of directors of that association. Twenty per cent ad valorem on the average cost of the horse would not by any means bar good horses from coming. I would like to ask the gentlemen what beginning is necessary to have this restored?

Mr. Rommell: I think that was brought out in the paper. The law that governs these cases is the tariff law. This law that governs now is an amendment to that act that was passed on March 3, 1903. That was passed on account of a ruling of the general appraisers that animals imported for sale would be dutiable. Now, if the breeders of the country want to amend anything of that kind, Congress is the body to go to.

Mr. Terry: I would like to ask the Professor if he can give us the laws and rules covering the French inspection.

Mr. Rommell: Before he is exported?

Mr. Terry: Can you give us the laws and rules governing the inspection in France?

Mr. Rommell: No, I can not. I do not think there are any laws in France for governing the exportation of horses. I do not think there are any particular laws except that an animal must pass a board of inspectors that are supposed to be competent to judge.

Mr. Robison: I would like to hear from you in regard to what you think of Government supervision of registry books, the same as they have in other countries.

Mr. Rommell: Well, we have got more than some have.

Mr. Robison: What is the advisability

ity of Government control and inspection of registry books?

Mr. Rommell: Well, we have that already to a certain extent. The order that I referred to requires reports every year from associations. When a volume of their herd books comes out we go over it pretty carefully, and any laxity or crookedness it seems to me would appear from that inspection. That order has not been in effect quite long enough for one to say how it will work out, but at the present time it seems that it will have a satisfactory effect and that it will be useful. It was published on October 4, 1904. It is working very nicely at the present time. The first of November this year will be a rather crucial point for the reason that that is put as the time limit for a certified association to publish a volume of its record. You will be surprised to learn that there are some who have been in business in this country ten or fifteen years who have never published a book of record. We require the publication of a volume once in four years.

Mr. Avery: Isn't that a long period?

Mr. Rommell: Yes, sir; very much too long. By establishing the four-year period the department thought it was establishing a period no one could object to because it was too strict. It seems to me that an association that is doing business ought to publish a volume every year.

Mr. Avery: I would like to ask the Professor what he believes of Government system of pensioning sires. As a matter of fact, some pension is practised in every country from which we are now importing our best sires.

Mr. Rommell: You mean subsidy, rather than pension. I am inclined to doubt the constitutionality of a plan of this kind, for this reason, that the

Dollar Package FREE Man Medicine Free

You can now obtain a large dollar size free package of Man Medicine—free on request.

Man Medicine cures man-weakness.

Man Medicine gives you once more the gusto, the joyful satisfaction, the pulse and throb of physical pleasure, the keen sense of man-sensation, the luxury of life, body-power and body-comfort—free. Man Medicine does it.

Man Medicine cures man-weakness, nervous debility, early decay, discouraged manhood, functional failure, vital weakness, brain fag, backache, prostatitis, kidney trouble and nervousness.

You can cure yourself at home by Man Medicine, and the full size dollar package will be delivered to you free, plain wrapper, sealed, with full directions how to use it. The full size dollar package free, no payments of any kind, no receipts, no promises, no papers to sign. It is free.

All we want to know is that you are not sending for it out of idle curiosity, but that you want to be well, and become your strong natural self once more. Man Medicine will do what you want it to do; make you a real man, man-like, man-powerful.

Your name and address will bring it; all you have to do is to send and get it. We send it free to every discouraged one of the man sex. Interstate Remedy Co., 1468 Luck Bldg., Detroit, Mich.

5¢

invested in a package of

Uneeda Biscuit

teaches you many truths:

That soda crackers are the best of all food made from flour.

That Uneeda Biscuit are by far the best of all soda crackers.

That Uneeda Biscuit are always fresh, always crisp, always nutritious.

NATIONAL BISCUIT COMPANY

WE WANT NAMES

We want YOU to send us the names and addresses of from ten to twenty-five farmers living in the United States, each one having five cows or more. You can send us the names from any number of different post-offices. If you will send us these names we will send you FOUR BEAUTIFUL PICTURES FREE. These pictures are reproductions of the most celebrated paintings in the world, and they are of high quality, and we know that you will be pleased and delighted with them; no pictures will be given for a list of less than ten farmers.

We want to send a sample copy of the special dairy edition of the RURAL HOME to a lot of farmers who are not now taking our paper and that is the reason we want these names.

Send us immediately a list of at least ten farmers and we will send you, ABSOLUTELY FREE, FOUR REPRODUCTIONS OF THE WORLD'S FAMOUS PICTURES. Address THE RURAL HOME, 20 North Williams St., New York, N. Y.

National Government has power over everything that affects interstate commerce. As a general rule, stallions are doing business within a State, and I doubt whether that thing would hold. I agree with you that the proposition works well in Europe. It seems to me that it is something that ought to be tried. The States themselves have much more power, and they could handle the proposition more economically than the Federal Government could.

J. W. Robison: The question has been asked, What regulation or what inspection is required in France before a horse can leave that country? The inspection there, if it is carried out in a rigid form, is ample and sufficient.

No horse can leave the commune where he is bred and owned and raised without a certificate of health.

That is well, but when he gets to the point of exportation—Havre being the principal point—he is again inspected by the French State Veterinarian, and he must be sound and reasonably free from disease.

Now, the registry books—we surely should have reform. We should have less registry books and better,

more accurate and more truth in them,

and the regulation that they should be published at least every four years is a very reasonable one.

President Bohrer, of the Bee-Keepers' Association, was introduced, and gave an interesting and instructive talk on bee culture.

N. H. Gentry, of Sedalia, Mo., who was on Tuesday's program, but was not present at that time, was called for.

Mr. Gentry: I was on the program yesterday, I understand—the swine program.

Mr. Heath did not state in his introduction what he wanted me to talk to you about. I suppose, though, about the State fair. I am not at present connected with the State Fair of Missouri. I was on the State Board of Agriculture when the fair was started.

The first thing was we had to pass an act authorizing a State fair, and a location. The location of it was trusted in the hands of a State Board of Agriculture.

We received bids first from different localities in the way of contribution in the way of land.

That of course was taken into consideration. I want to say I was in favor of locating the fair at Kansas City. Kansas City made no bid. Unfortunately the time was short.

We located the fair at the largest point that made a bid for the fair.

We have a good location there,

and I think in time we will build up a big fair.

Collections made in all parts of the United States
No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

TOPEKA. KANSAS

Special attention given to stock-breeders accounts.

Reference furnished on application.

Mr. Gentry was asked to make a few remarks more in line with his original subject "Breeding the Winners."

I appreciate that the Berkshire hog has given me somewhat of a reputation. A good deal could be said on this subject, and with it would necessarily go not only breeding the winner but development of it. There has been many a prize-winner bred that has never been heard of because it was not developed right. There is just as much in development as there is in breeding, and you receive only as you develop with intelligence. Plenty of men that are good enough judges, that are capable of selecting good stock, yet they fall down when they develop. Be quick to see when things are going wrong. Do not show so much interest in something else that you can not see to your stock.

Mr. Dietrich, of the Illinois Agricultural College, was introduced by the secretary.

Mr. Dietrich: I can not say anything additional to what Mr. Gentry has said. It is a subject that is very important.

It is being followed up all along from the beginning; not only the beginning of the animal but from generations back. You can not expect any animal to breed anything better than himself, that is, the average of the offspring will usually be the same as the parent stock.

Occasionally you may have one that is better. Very often you have one that is poorer. The chances are you will get one out of a hundred which will be a prize-winner.

After you have produced the prize-winner in the way of breeding it depends on the way he is fed. You may take the best animal that was ever bred, and if you do not feed him properly you can never make a prize-winner out of him.

Mr. Gentry: On this State fair question there is this: My advice is to run a clean fair; a fair the surroundings of which will not be degrading the farmers of the State. Let it be a clean place, free from vice. Not only that, I have never been in love with the side show. There is no more place at a

(Continued on page 171.)

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

SEEDS That will Grow PLANTS That will Bloom

Nine better, even at the high prices. Special bargains. SEEDS, 10 pks. Annual Flowers, 10c; 5 pks. Vegetables, 10c. PLANTS, 6 Roses, 25c; Geraniums, 25c; 6 Begonias, 25c; 6 Pelargoniums, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Peacock free.

A. C. Anderson, Columbus, Nebraska.

BARGAINS IN SEEDS

Choice kinds of Vegetable and Flower Seeds at 2 cents per Packet. Flower Plants, 5 cents each. Many choice novelties. Don't buy until you see our New Catalogue. Mailed FREE if you mention this paper.

IOWA SEED CO., DES MOINES, IOWA.

TREES THAT ARE CHEAP

In price and of the best quality, free from disease and true to name. Complete assortment. Due bill good for 25c and catalogue free. Freight paid on \$10.00 Orders.

FAIRBURY NURSERIES. Box L, Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES

Small Fruits and Evergreens, Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed.

Gage County Nurseries, Box 609, Beatrice, Neb.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamington and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois

Trees, Plants & Seeds THAT GROW
Best quality. Goodbearers. Low prices. Apple 40c; Plum and Cherry 12c; Peach 4c; all budded; Concord Grapes 20c; Forest Tree Seedlings \$1 up. **GERMAN NURSERIES**, Carl Sonderagger, Prop. Tested very cheap. Freight paid on trees. Catalogue, English or German, free. Write for it today. Address **GERMAN NURSERIES**, Box 9, Beatrice, Neb.

HARDY EVERGREENS
We grow them by the million. To prove they are healthy and vigorous we offer 12 Spruces and Pines at FREE to property owners. Mailing expense 6c, whether end or not. A postcard will bring them. Catalogue with 43 colored plates of Hardy Plants etc. Write today. The Gardner Nursery Company, Box 740, Osage, Ia.

Iowa Produces the Best SEED CORN

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 54, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo.

GOOD SEEDS CHEAP
BEST EVER GROWN

A wonderful big catalog. Full of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds.

Big Lot of Extra Packages Free to Every Customer.

Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

DON'T MISS THIS CHANCE

SALZER'S SEED BARGAIN BOOK

You can make your years' success an assured certainty by sending at once for a free copy of Salzer's remarkable Book of **SEED BARGAINS**

and, taking advantage of the astonishing offers made therein. They cover such varieties as Oats; Barley, Corn, Speltz, Clover, Timothy, Wheat; also Cabbage, Radish, Beets, Peas, Beans, Onions, Tomatoes, etc., all of the strongest, hardest Northern Grown, pure, pedigree stock.

5 Tons Grass Free!

Everybody loves a rich, prodigal growth of grass or fodder for cattle, sheep, horse or swine! If you will send this notice in to us to-day, you will receive our Bargain Seed Book free, together with sufficient grass seed to grow 5 tons of rich grass hay on your lot or farm this summer! All free for the asking!

It costs 4¢ and we add a package of Cosmos the most fashionable, serviceable, bearable annual flower.

JOHN A. SALZER SEED CO.,
Lock Box 56. La Crosse, Wis.

Horticulture

The Ideal Horticulturist.

EDWIN SNYDER BEFORE THE KANSAS STATE HORTICULTURAL SOCIETY.

He doesn't live—he never lived. Adam was probably a very good man in his way. They say he had a nice garden; but he was a sort of a "hand-me-down, ready-made horticulturist." If he had known enough to have killed the serpent and disciplined Eve a little, he might not have lost the title to his real estate. As a horticulturist, he should have had an easy time. No codling moth or canker-worm or tent caterpillar or San Jose scale or other pestiferous insects to pester and annoy; and no scab or blight or fungus disease to spray for; no commissioners to quarrel with, because of unsatisfactory sales; and no railroads or express companies to absorb the profits of the business with exorbitant charges. It must have been that in some way he was a poor tenant, or he never would have been served with that writ of ejection.

I never took much stock in the forbidden-fruit business; and yet, I must admit that ever since Adam's time, what is forbidden by law, human or Divine, seems to have a great fascination for the sons and daughters of men.

The boy frequents the "swimmin'" hole in spite of the maternal injunction not to; and some grown men find a peculiar fascination, if little profit, in violating the Kansas prohibitory law. I have often wished Adam had behaved himself, so that we might not have inherited his disagreeable traits; and had he been an ideal horticulturist, he surely would.

The ideal horticulturist is an absolutely honest man. He is a worker—a persistent, steady worker. He deals with nature, and nature is profoundly imbued with integrity; is implacably hostile to untruth and sham; so inflexible in giving so much for so much and yielding no more to whatever of cajoling or wheedling, that the horticulturist, as a worker, is absolutely constrained to honesty. He may be tempted to cheat in trade; to put the best berries on top; to face the package with superior fruit, and fill up with an inferior article. But he knows better than to attempt to defraud nature; for he knows that every crate of berries or box or barrel of apples cost so much of mental and physical effort and can be secured by no less.

I am glad the horticulturist is compelled to work. I have unbounded faith in the beneficence of labor as a foundation for human education and discipline. Upon this subject the great essayist, Channing, said: "Man owes his growth, his energy chiefly to the striving of the will, that conflict with difficulty, which we call effort." Easy, pleasant work does not make robust minds; does not give men a consciousness of their powers; does not train them to endurance, to perseverance, to steady force of will, that force without which all other acquisitions avail nothing. Manual labor is a school in which we are placed to get energy of purpose and character; a vastly more important endowment than all the learning of all other schools. They are placed indeed under hard masters, physical suffering and want, the power of fearful elements and the vicissitudes of all human things. But these stern teachers do a work that no compassionate, indulgent friend can do for us, and true wisdom will bless Providence for their sharp ministry.

"The material world does much for the mind, by its order and beauty; but it does much more for the mind by the pain which it inflicts; by its obstinate resistance which nothing but patient toil can overcome; by its vast forces, which nothing but unremitting skill and effort can turn to our use; by its perils, which demand continual vigilance and by its tendency to decay. I believe that difficulties are more important to the hu-

man mind than what we call helps. Work we all must if we mean to bring out and perfect our nature. No business which does not present obstacles, tasking to the full the intellect and the will, is worthy of a man."

Measured by the obstacles and difficulties he must overcome to be successful in his calling, the horticulturist must be possessed of about all the graces and virtues. The ideal horticulturist is not afraid of work. He shrinks at no problem the science of horticulture may present. No theory of the enthusiast however plausible is accepted by him without first passing the ordeal of actual experience.

The glib agent appears with the device of a lamp and a pan of coal-oil to catch the codling moth by night. The horticulturist is from Missouri and must be shown. When the unfortunate nursery agent presents to him the plausible but fallacious theory of the superiority of the whole-root grafts over the piece-root and asks him to invest, he is likely to invite the gentleman to "go hence" or to "get thee behind me," or make some similar remark that may be easily comprehended. They say a sucker is born every minute and one dies as often. The ideal horticulturist will never be accused of being in this class. One of his characteristics is, "He is not afraid of manual labor." He is not specially anxious to live by the sweat of some other man's brow. He believes in the dignity of labor, in its beneficent, elevating influence upon the laborer. He insists upon honest, efficient work by his employees and cheerfully sets them the example when necessary. The theory of working eight hours, loafing eight hours and sleeping eight hours, finds no sympathy with him. Better overburdened than not burdened at all, better wear out than rust out. Better, a thousand times better, not only for the man himself, but for society as well, that a man should work himself to death rather than shirk himself to death. The ranks of able-bodied pauperism and crime are constantly being recruited from the idle and unemployed; not voluntarily idle perhaps, but because they have not been taught in youth, any useful work or trained to systematic habits of industry.

The ideal horticulturist is a public benefactor in that he would change all this by keeping the youth of the land of both sexes skilled in his line of work and at the same time pay them a reasonable compensation for their services. The wisest and most beneficent philanthropy is that which teaches the otherwise idle youth to be self-helpful and inculcates habits of industry and thrift. The ideal horticulturist must possess the homely virtues, "pluck" or "grit" without which all efforts and the best-laid plans are liable at any time to fall flat. "Pluck wins, it always wins." The "days are dark and nights go slow, 'twixt days that come and go." Still pluck wins.

"Its average is sure. He gains the most who can the most endure; Who faces issues, who never shirks, Who waits and watches and always works."

Well, I have waited for an apple crop for three weary years, and have watched an abundant promise and profusion of blooms, under the blighting influence of the east winds, cold rains, or freezing temperature, fade into almost utter failure; and yet I am not discouraged. "Hope springs eternal in the human breast." I will keep my orchards in as good condition as I can and sometime my reward will come. The most successful fruit-growers are those who have conquered the greatest discouragements. J. H. Hale in the beginning of his memorable career as a peach-grower was beset by embarrassing debt, and met the discouragement of three successive failures of his first Connecticut peach orchard, due to inclement winters, but pluck and persistence won and he enjoys the distinction of being the most successful and extensive peach grower in the world. The ideal horticulturist is a lover of nature. He is above the mercenary spirit of the age, which

Northern Grown SEEDS
OUR GRAND NEW BOOK
L'L May & Co., St. Paul, Minn.

50¢ IN SEEDS
FREE Write for our now, beautiful catalog of high grade seeds. Enclose five 2c stamps or a dime for mailing bush. We'll send free due bill for 50¢ worth of seeds, packet of seeds and handsome rose bush. Do it to-day. A. A. Berry Seed Co., Box 37, Clarinda, Iowa.

Most Extensive Grower of
Grape Vines
in America.
Intro. **CAMPBELL'S EARLY**, - The Best Grape
producer **JOSSELYN**, - - - The Best Gooseberry
of **PAY**, - - - - The Best Currant
Small Fruits. Catalogue Free.
GEO. S. JOSSELYN, Fredonia, N. Y.

The World's Fair Prize Winning Corn
Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tells how to raise Corn every year FREE. JOHN D. ZILLER, Hiawatha, Kansas.
HE RAISES CORN.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

50 BULBS
25 Cents.
Will grow in the house or out of doors. Hyacinths, Tulips, Gladiolus, Crocus, Fuchsias, Oxalis, Tuberoses, Begonia, Jonquils, Daffodils, Chinese Lily, Dewey Lily, Gladiolus, Lilies of the Valley—all postpaid, 25c. In stamps or coin. Asa premium with these Bulbs we will send FREE a big collection of flower seeds—over 200 kinds. HILLSIDE NURSERY, SOMERVILLE, MASS.

The Seed We Sell

GREGORY'S SEED CATALOGUE FOR 1906
One market gardener plants annually 75 pounds of our lettuce, another 500 pounds of our beet and a third 100 pounds of our onion seed. Such men can take no chances. We shall be pleased to sell you any kind of vegetable or flower seed equally good, from five cents' worth upward. Catalogue free.
J. J. H. GREGORY & SON, Marblehead, Mass.

EVERGREENS AND FOREST TREES
That are Sure to Satisfy
I have been growing evergreens and forest trees for 3 years, always with great success that satisfy. When you buy Hill's trees you get honest value—highest quality. My catalogue is my salesman; it's free. Contains 48 pages, illustrated with beautiful pictures; describes all kinds of nursery stock for all purposes—hedges, windbreaks and ornament. Also fruit trees, shrubs and vines. 50 Best Bargains ever offered—\$1.00 to \$10.00 per 100 Prepaid. Everything first-class, guaranteed exactly as represented. Write for catalog today.

D. HILL, Evergreen Specialist
Dundee, Ill.

High-Grade Flower Seeds.
20 Packages 10c.
KINDS. KINDS. KINDS.
Bat. Button, 10 Poppy, 20 Portulaca, 20
10-Weeks Stock, 10 Candytuft, 10 Marigold, 18
Eschscholtzia, 6 Aster, 16 Pansy, 10
Sweet Alyssum, 6 Zinnia, 12 Sweet Peas,
Sweet William, 8 Balsam, 12 Pinks, 10
Larkspur, 6 Petunia, 10
Nasturtium, 10 Callospis, 8
Sweet Mignonette.
All of the above sent to
any address, post-paid, for
10c. silver or six two-cent
stamps. As a premium
to introduce our seeds
to every household, we will also
send a collection of fine
beautiful bulbs FREE
with Catalogue.
Somerville Nursery,
BOMERVILLE, MASS.

HEALTHY TREES Honest in quality, Grafted Apples, Grafted Peaches, Budded Cherries, 15¢ each; good varieties, Concord Grapes, \$2 per 100; Black Locust and Rus Mulberry, \$1 per 1000. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.

SEED CORN

RIT ALWAYS PAYS to plant the **BEST**: RATEKIN'S "Pride of Nishna", yellow, "Iowa Silver Mine", and "Imperial" white; three best varieties in the world; pure bred, thoroughly graded and always grows. Planted by thousands of farmers everywhere for quarter of century. Earliest big eared corn in existence; won more prizes than all other sorts. It's guaranteed to please you. Change your seed and grow bigger yields: it's the kind it PAYS to PLANT. Our big fine illustrated Catalog of all Farm and Garden Seeds is FREE. Write for it today; a postal card will bring it to your door. Address:

RATEKIN'S SEED HOUSE,

Shenandoah, Iowa.

(The largest Corn Seed Growers in the World.)

TREE PROTECTORS

75 cents per 100
\$5 per 1,000

As valuable in summer against sun-scald, hot winds, etc., as they are in winter against cold and rabbits. Recommended by all leading Orchardists and Horticultural Societies. Send for samples and testimonials. Do not wait until rabbits and mice ruin your trees. Write us today. Wholesale Nursery Catalogue now ready. Send for copy. Agents wanted everywhere.

HART PIONEER NURSERIES
Box 17, FORT SCOTT, KANS.



Ferry's Seeds are best because 50 successful years have been spent in their development—half a century of expert care in making them superior to all others. We are specialists in growing flower and vegetable seeds. 1906 Seed Annual free.

D. M. FERRY & CO.,
Detroit,
Mich.

FERRY'S SEEDS

THE WORLD'S LARGEST CUCUMBER
ALSO THE WORLD'S LARGEST TOMATO

6 lbs., 2 ozs., was grown from our seeds. Our Big Garden Guide describes and illustrates the above, also our New Corn, "Nicholas' Golden Chisel," record, 372 bush. per acre. We offer \$5.00 per ear to growers this season, also \$100 for the largest acre yield of our New White Comet Oats, record, 183 bushels per acre. Send your name today for a copy of our Handsome New 1906 Catalog, and we will send you a Pkt. of the above Tomato Seed FREE.

ST. LOUIS SEED COMPANY
747-748 N. Fourth St. ST. LOUIS, MO.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

GOLDEN YELLOW
CALLA LILY, 5 Bulbs.
50 KINDS 10c.
SEEDS

Asters, Balsam, Canna, Calliprora, Nasturtium, Morning Glory, Pansy, Larkspur, Job's Tears, Poppy, Golden Glow, Snapdragons, Cosmos, Pink, Zinnia, Verbena, Monkey Plant, Sweet Rocket, Primrose, Ice Plant, Pelargon, Castor Oil Beans, Portulaca, Candytuft, Sweet Peas.

5 CHAMPION
BULBS.

The Summer Hyacinth, Golden Hyacinth, Humming Bird, Gladiola, Giant Tuberose, Baby Breath, Oxalis, all this beautiful collection of seeds and bulbs only 10c. in silver or 5-2-c. stamps to pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10 cents.

CHARLESTOWN NURSERY, - CHARLESTOWN, MASS.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

HOGS WILL MAKE YOU RICH
Send 10c for a whole year's trial subscription to the *Kansas Farmer* to receive 16 issues of the *Kansas Farmer*, Kansas City, Mo.

measures everything by the dollar mark. He is in no rush to get rich. He makes the world better by having lived in it. His life and work give inspiration to others. His premises and surroundings are an object-lesson to be emulated. He takes a public-spirited interest in public affairs, encourages the adornment of school and other public grounds by planting trees and flowers. He is respected in his community and regarded as a faithful exponent of horticultural interests; is always prepared to preach the gospel of horticultural lore and says with the poet:

"What does he plant who plants a tree?
He plants cool shade and tender rain;
The seed and bud of days to be,
And years that fade and flush again.
He plants the glory of the plain.
He plants the forest heritage,
The harvest of a future age,
The joy of inborn eyes to see.
These things he plants who plants the tree."

Mulching With Straw—Planting Evergreens.

Editor Kansas Farmer:—I have a small orchard about three years old. I am thinking of mulching it with straw to keep down weeds and expect to run water to the trees in ditches made under the straw. Would you advise mulching?

I intend setting a few Austrian pines this spring. What is the proper way to set and care for them? Will they do well this far west? Also, is it necessary to put sand around them on top of the ground to exclude air from the roots? Please answer through Kansas Farmer. G. T. S.

Hodgeman County.

We would not advise mulching orchards with straw heavy enough to keep down all weeds. The small roots would run too near the surface and be liable to injury from drought, and the sun would not have the effect on the soil necessary to a proper and healthy growth. A light straw covering would be less objectionable, but we believe most cultivators, in your section, prefer a dust mulch.

We quote from a veteran tree-planter of Central Kansas: "The red cedar, Scotch and Austrian pines have stood all the abuse I have ever known to be heaped upon them. No deciduous tree will stand more heat, cold or neglect. Dig the holes ten days or a month before planting the trees; fill them with water several times, and see that the ground is kept moist after planting."

It is essential in transplanting that the roots be kept continually moist as the sap when once dry forms a resinous compound not again soluble, and which obstructs circulation. Sand might be beneficial as a mulch, but we would not advise using it too heavily.

WALTER WELLHOUSE.

Fruit and Vegetable Garden.

Editor Kansas Farmer:—A fruit and vegetable garden for the busy farmer can be easily grown by taking about one acre, manure it heavily—about forty or fifty loads to the acre—plow about ten inches deep, in lands twenty feet in width, so as to drain readily. Set two or three rows of peach-trees, one row near each headland; and set two rows of raspberries to each row of trees; they make a fine growth and a large crop of berries each year. Mine produce twenty to twenty-five crates from one-fourth of an acre each year. Set a number of rows of cherries with two rows of gooseberries for each row of cherries. Set two rows of plums with two rows of blackberries; one row of pears with two rows of strawberries, one row of grapes, one row of Juneberries, one row of pie-plant, and the balance of garden to be worked with one-horse cultivator and a small amount of hoeing.

One acre so managed usually produces about \$100 worth per year, and does not materially interfere with farmwork.

C. E. HILDRETH.
Lambeth County.

The one and only law of life that sets a man free from all the forces that blight and destroy is the will of God. Show me a man who lives for one day wholly in word and thought and deed in the will of God and I will show you a man who is antedating heaven, and who for that day reaches the plane of life which is at once broadest, freest and gladdest.—Campbell Morgan.

Nations, like individuals, are powerful in the degree that they command the sympathy of their neighbors.

SEED CORN--REID'S YELLOW DENT AND BOONE COUNTY WHITE
This is not elevator corn, but real seed corn. Hand selected, tested and thoroughly graded. Good as you would select yourself. Sent on approval. Sample and catalogue free. Low Gap Seed Corn Farm, Arbela, Mo.

ALFALFA SEED

MCBETH & KINNISON

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

SEEDS

DIRECT TO CONSUMER—LOOK AT THESE PRICES: Red Clover, per bu., \$8.25; Alfalfa Seed, per bu., \$8.25; Timothy Seed, per bu., \$1.75; Fancy Kentucky Blue Grass Seed, per bu., \$1.75; Millet, Cane, Kafir-corn. Every thing for Farm and Garden. Also Poultry Foods, Oyster Shell Grits, Cracked Bone, etc. Low prices and choice goods. Write me.

T. LEE ADAMS, 417 Walnut St., Kansas City, Mo.

SEED CORN

All the leading and best varieties of choice selected, thoroughly tested seed corn, which have yielded 75 to 216 bushels per acre. Costs Only 25c Per Acre for Seed. Large descriptive catalogue of Corn and all kinds of Farm and Garden Seed mailed free if you mention this paper.

IOWA SEED CO., DES MOINES, IOWA.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to KANSAS SEED HOUSE Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.

We Are Growers of Pure-Bred, Medal-Winning Fire-Dried Seed Corn.

Twenty-five varieties. Will send you one of our new 1906 catalogues and four varieties, two white and two yellow, of what we consider the best for your section, or will send samples of any variety you may desire. MANY FARMERS ARE DOUBLING THEIR YIELD WITH OUR SEED. Our catalogue of farm, field and garden seeds will tell you why this is, and how you can do the same. Sent free on application.

J. B. ARMSTRONG & SON, Shenandoah, Ia.

REAL SEED CORN

Graded or Crated ON APPROVAL

"Your money's worth or your money back." How would you like to have some "Real Seed Corn?"—the pedigree kind?—bred from stock that swept everything at the shows?—selected and graded so it will drop 97 per cent correct in an edge drop planter?—or shipped in the ear crated? And if you could get that kind of seed corn shipped on approval, with a guarantee that if it did not suit you I would make it suit or refund your money—really, wouldn't you call that a fair, square deal? My

SEED CORN BRED FROM PRIZE-WINNING STOCK

is just that kind—it has won all the important prizes around here, both on yield and form. I grow it myself on good Page County clover sod upland, store it in modern seed houses, select it carefully and ship it in the ear or shelled as you prefer. And it will grow, too—every lot is tested and guaranteed to show satisfactory test for you—or we trade back. Besides Seed Corn I sell all kinds of seeds—garden seed, seed potatoes, flower seed, clover seed—all tested and guaranteed. Send for my catalog, it's free, and I will add samples of garden and flower seeds and 10 kinds of seed corn, if you care to put up the postage for them. Write today, you'll like the way I treat you, and you'll like the seed I sell.

HENRY FIELD, Seedsman
Box 55, Shenandoah, Iowa
"The Ear Seed Corn Man"

FRUIT TREES AT WHOLESALE PRICES

Buy Direct

from us and save agents commission of 40 per cent. We not only save you money, but save you disappointment in quality of trees and time in shipment, as we are in direct connection with all points in Kansas, Missouri and the Southwest. We ship all stock promptly and deliver it in good condition. All our trees and bushes are selected from choice stock that is TRUE TO NAME and especially adapted for the soils and climate of these localities. The standing and reliability of the

Wichita Nursery

is vouchered for by a long list of satisfied customers which we have throughout this region. Here is what one of our customers says, and the satisfaction he expresses is universal.

Wichita Nursery, Wichita, Kan.

Dear Sirs:—I received the trees and strawberry plants all O. K. They are certainly fine and arrived in good condition. Many thanks.

J. T. COOPER.

We aim to make every customer a satisfied one. WRITE NOW for wholesale price list and learn how much we can save you on your tree purchases.

Wichita Nursery, Box B, Wichita, Kan.



POULTRY BREEDERS' DIRECTORY

WHITE HOLLAND TURKEY EGGS—\$1.50 per
dozen. T. J. Sweeney, Route 2, Maple Hill, Kans.

FOR SALE—Young M. B. Turkey toms from
high-scoring, prize-winning stock. Book your or-
der now and secure early eggs for hatching, \$2 per
dozen. S. C. Brown and White Leghorns, S. Spangled
Hamburgs, S. C. Black Minoras. \$1 per dozen. Vir-
taurus, Kinsley, Kans.

ELM GROVE POULTRY FARM—Light Brahma-
hens; cockerels \$2. Eggs, \$1.25 per dozen. Miss Eliza
Burke, Route 8, Emporia, Kans.

SILVER LACED WYANDOTTES—Thorough-
bred cockerels, \$2; pullets \$1.50. Jewett Bros., Dighton,
Kans.

MAMMOTH BRONZE GOBLERS—Extra nice
large young toms, \$5 each. Buy one to improve your
flock. C. E. Durand Plantation, Hutchinson, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Ita-
ven, Kans. Pure-bred Buff Plymouth Rock eggs, 50¢ per
dozen; \$2.30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

BLACK LANCASHIANS—My entire flock for sale
cheap. Prize-winners. Eggs, \$1 per dozen. O. S. Allen,
1629 W. 6th, Topeka, Kans.

CHOICE B.P. ROCK cockerels and pullets. Collie
pups; send for circular. W. B. Williams, St. Louis, Mo.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandot-
tes, \$1 per dozen. W. H. turkeys, \$1.50 per dozen. F.
deau geese, 20c each. W. W. Africane guineas, \$1 per dozen.
All guaranteed pure-bred. A. F. Hutley, Route 2,
Maple Hill, Kans.

FOR SALE—Exhibition S. C. Black Minoras
cockerels, \$2. I guarantee them. Address George
Kern, 817 Osage street, Leavenworth, Kans.

MAMMOTH BRONZE TURKEYS and Golden
Wyandottes. Young stock for sale. Address, Mrs.
A. B. Grant, Emporia, Kans.

STANDARD BREDS SINGLE COMB BUFF LEG-
HORNS—Headed by first prize pen Chicago show
1903 and took six first prizes and first pen at New-
ton 1904. Eggs \$3 per dozen. S. Perkins, 801 East First
Street, Newton, Kans.

S. C. W. Leghorns and Buff Rocks. Winners at
State Fairs. Eggs \$1 per dozen. J. W. Cook,
Route 3, Hutchinson, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50
Buff Leghorns to Shawnee county farmers. Will
buy the chicks and eggs. Write me. W. H. Max-
well, 921 Topeka Ave., Topeka, Kans.

BARRED AND WHITE PLYMOUTH ROCK EG-
GGS, \$2 per dozen. \$5 per dozen. Hawkins and Bradley
strains, scoring 93½ to 94½. Mr. and Mrs. Chris
Bearman, Ottawa, Kans.

WHITE WYANDOTTES—Choice Cockerels,
Pullets or Hens for sale cheap. S. W. Arzt, Lar-
ned, Kans.

BLACK LANSHAN EGGS—From birds scoring
from 93½ to 95½, \$1.50 and \$2 for 15 eggs. Wm C
Knapp, Pleasant Hill, Mo.

FOR SALE—Choice S. C. B. Leghorn cockerels,
\$1 each. J. N. Sheldon, Route 1, McPherson, Kans.

FOR SALE—S. C. B. Leghorn cockerels, pure-
bred, farm raised, "vigorously," from high scoring
stock; \$1 each, f. o. b. Address T. D. Marshall,
Modoc, Kans.

MORE first prizes than all other exhibitors com-
bined at the late Kansas State Poultry Show in
C. Brown Leghorns. Stock and eggs for sale. S. C.
Short, Leavenworth, Kans.

BARRED ROCKS EXCLUSIVELY—Left ei-
strain. Large, heavy boned, fine, clear; Barry's
first-class birds, \$1 to \$5 each. Satisfaction guaran-
teed. Write for catalog to Lawndale Poultry Yards
John D. Ziller, Hawatha, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue
Ribbons at Great Bend, Emporia, Wichita; 15 for \$2.
W. C. Watt, Walton, Kans.

ROSE COMB BROWN LEGHORN COCK-
ERELS, from fine egg-laying strain. Bertha Gres-
ham, Bucklin, Kans.

S. C. B. LEGHORNS EXCLUSIVELY—40 pure
bred cockerels for sale, \$1 each or \$9 per dozen.
F. T. Thomas, Route 1, Irving, Kans.

NICE BLACK LANGSHANS—For sale cock-
erels, hens and pullets; \$1 each. Mrs. Geo. W. King
Solomon, Kans.

WHITE PLYMOUTH ROCK COCKERELS,
farm raised, large boned, yellow legs, bay eyes,
\$1 each. Eggs for hatching in season, 15 for 75c.
D. S. Thompson, Rural Route 1, Welda, Kans.

S. C. B. LEGHORNS—Closing out sale of my en-
tire flock of hens, cocks and cockerels. A bargain
Come quick. J. A. Kaufman, Abilene, Kansas

LOOK HERE—TRY me on the big-boned Black
Langshans, scoring from 90 to 95½. Charles Leep-
er, Harper, Kans.

WHITE WYANDOTTE COCKERELS, (Stay
away) \$1 to \$5 each. Eggs, \$1.50 per dozen. S. W.
Arzt, Larned, Kans.

MAMMOTH BRONZE TURKEYS, Silver Laced Wy-
andotte cockerels for sale. Address Francis Long
Madison, Kans.

AMERICA'S CENTRAL POULTRY PLANT can
furnish strictly pure Black Buff, Black and
White Langshans, Buff Leghorns and Light Brahma.
Write early and get your choice. J. A. Lovette,
Prop., Mullinville, Kans.

MAMMOTH BRONZE TURKEYS for sale. In-
quiry of Mrs. T. M. Fleming, Fontana, Kans.

SINGLE COMB WHITE LEGHORN cockerels
\$1 each; two or more 80 cents each. Fine white
pure, thoroughbred birds. Also a few Barred Ply-
mouth Rocks, barred to the skin, fine, pure and
vigorous; hens, cockerels, cocks and pullets, \$1 each;
two or more, 80 cents each. All of our customers
are very well pleased. We will make reductions on
large lots. Meadow Poultry Farm, Coniferille, Ill.

FOR SALE—150 B. P. R. and W. P. R. cockerels
and pullets; strong, vigorous, cockerels, \$2 to \$5;
pullets, \$1 to \$2.50. Exhibition cockerels matter of
correspondence. Mr. and Mrs. Chris Bearman
Ottawa, Kans.

BROWN CHINA GESE, Indian Runner Ducks
also Barred Rock Cockerels. Prize winners at
State poultry Show.
O. C. Sechrist, Meriden, Kans.

LIGHT BRAHMAS
More prizes than any breeder in the state: 10 firsts
this season. Eggs, \$1.50. Cockerels, \$2 to \$4.
T. F. Weaver. - Blue Mound, Kans.

FOR SALE.
15 varieties pure-bred chickens, ducks,
geese and turkeys. Fowls and eggs at
low prices. Write for catalogue. M. H.
Hiniker, Mankato, Minn., R. R. 4.

THE KANSAS FARMER**The Poultry Yard****The Hen Versus the Incubator.**

Mrs. Grace S. Brobst, before Oak
Grange Farmers' Institute.

Woman that abideth with man is of
few days and exceedingly full of trouble.
She beholdeth her depleted purse,
and pondereth how she may replen-
ish it.

She considereth a flock of fowls and
buyeth them.

But her husband liketh not poultry—
liketh only fried chicken and pot-pie;
therefore he provideth no place for
their habitation, neither alloweth he
them to partake of his substance.

The woman is not so; for behold she
riseth up early while it is yet dark
and maketh her way to the granary,
where she calleth her flock about her
and of the grain she feedeth them
abundantly.

She alloweth them to roost in the
branches of the trees, in the barn also
and upon the fence. She buildeth them
nests of alfalfa. So it is that "the help-
ful hen" getteth busy right soon, and
verily her cackle is heard from the ris-
ing of the sun until the going down
thereof.

Then cometh the farmer and findeth
hens sitting in the mangers of the
horses. It maketh him angry, for he
seeth not the relation between the sit-
ting hen and the chicken dumplings
smiling upon him from his midday
meal. So it cometh to pass that he
hath an interview with the woman and
what he sayeth to her, behold it is not
written in these chronicles. But the
woman maketh other nests for the sit-
ting hens, with cracker-boxes and a
tack-hammer maketh she them and fill-
eth them with straw.

But it is so that "the helpful hen" is
feminine and behold she hath a mind
of her own; therefore she refuseth to
accept any substitute for the nest of
her choice and although she is safe
within, she endeavoreth to get out and
continueth her endeavors until the eggs
are blended with the straw in the nest.

When the woman cometh and findeth
things in such a state she casteth the
hen into prison until such time as she
giveth up her desire to sit and return-
eth to the business of egg-production.

Other hens she setteth, and the busy
hens find those particular nests very
attractive for laying and the demon-
stration which followeth mixeth up the
eggs with a great mixture.

A few hens she succeedeth in setting
long and well, but she knoweth not
when she setteth a hen, whether said
hen will remain firm in the faith that
is within her, or, if after she hath been
on probation for a few days, she will
reconsider the matter and decide to re-
main in society. So it is that the wo-
man becometh distracted in her little
hencdom.

She is reluctant to give up and stop
trying for she knoweth by the light-
ness of her purse that the chicken busi-
ness is a very weighty matter.

While she yet pondereth these things
in her heart, there cometh the Kansas
Farmer and the Mail and Breeze, telling
about a wonderful machine, in which
to place nice fresh eggs and after many
days behold it hatcheth them.

Her heart is filled with a great hope
and she sendeth for a catalogue. It ar-
riveth in due season, she readeth it well
and thinketh that at last her troubles
are over; but when she asketh her hus-
band to purchase an incubator he
laugheth her to scorn. But being wise
in her day and generation she answer-
eth him enough but feedeth him the
more on the spoils of her flock and be-
hold he relenteth and telleth her that
she might sell enough chickens to make
the purchase.

So she goeth to the coops and select-
eth various fine fat hens, for she read-
eth in the daily paper that fat hens
bring ten cents per pound in the local
market.

She riseth up early, therefore, and
getteth her with her fowls to town.
Her husband goeth not with her but
stayeth at home and cutteth stalks.
The poultry-dealer weigheth the hens
and cheatheth her. The price also, he
telleth her is not so; for behold, the
price of hens goeth down to seven cents
but yesterday. She draweth one sigh of
disappointment and taketh what the
dealer is willing to give her, and add-
eth the price of the great basket of
eggs which she bringeth with her and
straightway sendeth for an incubator.

In due season the incubator arriveth
at the freight depot and the woman
persuadeth the farmer to get it, and

POULTRY BREEDERS' DIRECTORY**MAMMOTH BRONZE TURKEYS**

FOR SALE—Young toms and poults, healthy and
well-bred stock. Inspection and correspondence
invited. Address J. E. Miller, Burdette, Kans.

C. W. LEIGHTON

Breeder of Black and White Langshans
A few more cockerels for sale including winner of
4th prize at State Show Jan. 1906. Eggs, \$1.50 per dozen;
from 3 high-scoring pens.

WHITE HOLLAND TURKEYS

World's Fair Prize-winners. Also Barred Plymouth
Rock chickens. Stock for sale, and eggs in season.
Address

Miss Lillian Schanl, Lexington, Mo.

BLACK LANGSHANS

Bred by John Shank, New Cimbria, Kansas
Stock and eggs for sale. Eggs, \$2 per dozen.

Silver Wyandottes, Indian Runner Ducks
and Fox Terrier Dogs
Stock for sale at all times. Address

M. B. CALDWELL, - Broughton, Kansas

R. C. Rhode Island Reds

Winner at the 1906 Kansas State Poultry Show of
1 and 2 prizes on cock, cockerel and pen, 1, 2 and
4 on hen, and 4 on pullet. Twenty-five cockerels for
sale; also six choice White Plymouth Rock cock-
erels. Write for prices.

A. D. WILLEMS, Inman, Kans.

Fancy Black Langshans

G. C. MILLER, Breeder.

Stock for sale. Fifteen eggs for \$2. Address
546 Missouri St., - LAWRENCE, KANS

AMERICA'S CENTRAL**POULTRY PLANT**

Buff, Black and White Langshans, Buff Leghorns
and Light Brahma. Stock for sale. Eggs in season.
J. A. LOVETT, Prop., - ROUTE 1, - MULLINVILLE, KANS

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3,
4, 5 pens; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet; 2, 4, 5 cock-
erels. Young cockerels for sale. Eggs, \$1.50 to \$2.50
for 15, from high-scoring pens.

R. B. Steele, Sta. B. Topeka, Kans.

ACME CHAMPIONS

Bronze keys. Show Champion, Topeka and St. Joseph, winning ten
lists, three 2nd, two 3rd prizes; only 7 birds entered.
Barred Rocks, 1st, 3d hen, Topeka, 93½, 92½, 5th
cock 90%; 4th pen St. Joseph, 2d hen 92½, 3d cock 91,
own 2d cockerel, 93%. Eggs, \$3 per dozen; \$5 per dozen.
M. B. Turkey eggs, \$1 each. Cockerels for sale.
Pullet breeders specialty. Mrs. W. B. Popham,
R. F. D., Chillicothe, Mo.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and
lice destroyer. Guaranteed to kill mites and lice if
properly used. If not satisfied return bottle and la-
bel and money will be refunded.

CHAS. E. MOHR,
Glendale Park, Hutchinson, Kansas.

Barred Plymouth Rocks

from \$100 Chicago winner, male line. Cockerels and
hens, \$2 and \$5. Entire stock last year breeding,
S. C. B. Leghorns, hens and State Show winning
cock, 5th pen. Pen of 1 cockerel and 6 R. C. B.
Minoras, \$12. Fine Buff P. Rocks, White P. Rocks,
and White Wyandottes. Eggs at a bargain, from
this year's State Show winners.

STANDARD POULTRY YARDS.
Abilene, Kans.

**Rose and Single Comb White Leghorns
and White Wyandottes,**

in all their purity, unsurpassed in ev-
ery respect for beauty, utility and winter
laying. At the largest State pou-
try show in the United States just held,
26 prizes were awarded to me. Write
for my catalogue giving prices on
stock and eggs. W. S. Young, McPherson,
Kans.

A. H. MILLER. - Bern, Kans.

200 Barred Rock Cockerels

For Sale. Sired by the First Prize cockerel Kan-
sas State Show 1905. If you want first-class cockerels
for utility or the show room, write me at once. I
can please you in both quality and price. I also
have 30 yearling hens, (cockerel bred) cheap to
make room. Let me mate a trio or a pen for you
that will give satisfactory results. Satisfaction guar-
anteed or money refunded.

THOMAS OWEN, Sta. B., Topeka, Kansas.

SCOTCH COLLIES—Scotch Collie pups from reg-
istered stock for sale. Emporia, Kans. W. H.
Richards, V. S., Emporia, Kans.

**POLYTRY FEEDING
AND FATTENING**

A handbook for poultry keepers on the standard
and improved methods of feeding and marketing
all kinds of poultry.

The subject of feeding and fattening poultry is
prepared largely from the side of the best practice
and experience here and abroad, although the
underlying science of feeding is explained as fully
as needful. The subject covers all branches, includ-
ing chickens, broilers, capons, turkeys and water-
fowl; bow to feed under various conditions and for
different purposes. The whole subject of capons and
caponizing is treated in detail. A great mass of
practical information and experience not readily
obtainable elsewhere is given, with full and ex-
plicit directions for fattening and preparing for
market. The broad scope of the book is shown in
the following

TABLE OF CONTENTS

Thrifty Growth. Expert Chicken Feeding, Broiler
Raising, Nutrition for Layers, Special Foods, To-
Finish and Dress Capons, The Art of Poultry Fat-
tening, Lessons from Foreign Experts, American
Fattening Methods, At Killing Time, Preparing
for Market, Marketing Turkeys and Waterfowl,
Finish and Shaping.

Profusely illustrated, 150 pages, 5x7 1/2 inches,
cloth. Price 50 cents postpaid.

Kansas Farmer Company

Topeka, Kansas

When writing advertisers please
mention this paper.

POULTRY BREEDERS' DIRECTORY**Light Brahma Chickens**

Choice pure bred cockerels for sale. Write or call on
Chas. Foster & Son, Eldorado, Kan. Route 4

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—
Fine stock; farm raised. Price, \$1 for 15; special
price by the hundred. Shipped by express, care-
fully packed, anywhere. Mrs. O. E. Walker, Route
8, Topeka, Kans.

**Buff Orpingtons
and Buff Legh**

More and Fertile Eggs

Your hens will positively lay more eggs, and a larger per centage of fertile eggs, if they are given regular doses of Dr. Hess' Poultry Pan-a-ce-a with the daily food. It produces this result by the action of bitter tonics which increase the powers of digestion, enabling the system of the fowl to extract the maximum amount of egg-making material from the food and convert it into eggs. It also supplies iron for the blood, and the nitrates to assist nature in expelling poisonous materials through the skin.

DR. HESS POULTRY PAN-A-CE-A

Is the prescription of Dr. Hess (M.D., D. V. S.), and besides increasing egg production, it cures and prevents poultry diseases. It contains germicides which destroy bacteria, the cause of nearly all poultry diseases. It has the endorsement of leading Poultry Associations of the United States and Canada. Costs but a penny a day for about 50 fowls, and is sold on written guarantee.

1½ lbs. 25c, mail or express 40c
5 lbs. 60c
12 lbs. \$1.25
25 lbs. \$2.50

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK
Ashland, Ohio
Instant Louse Killer
Kills Lice.

METAL MOTHERS

Complete fire-proof hatching and brooding plant for \$7.50. 2 qts. oil hatches 50 eggs and raises chicks. Catalogue free. CYCLE HATCH-ER CO., Box 297, Salem, New York.

GREIDER'S FINE CATALOGUE
of Standard bred poultry for 1906, printed in beautiful colors, contains Fine Chromo, and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, lice, etc. This book only 10 cents. B. H. GREIDER, RHEEMS, PA.

STEINMESCH'S CHICKENS
Winners at St. Louis and Portland. Farm raised. 15 varieties. Catalog FREE. Contains "Some Good Suggestions. Write. Steinmesch & Co., 312 Market St., St. Louis, Mo.

**\$12.50 For
200 Egg
INCUBATOR**
Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day. GEO. H. STAHL, Quincy, Ill.

Good Hatches Promised
It's a pleasure to hatch lots of chicks in a HATCH-ALL INCUBATOR. Pure air, even heat, little care, simple directions make it easy for beginners or those experienced to make money on poultry. Write for free catalog to HEBRON INCUBATOR CO., Box 18, Hebron, Neb.

**The Racine
Incubator**
Built by the man who devoted 24 years to its present perfect development.
Can be operated by anyone, anywhere. Automatic regulator, copper tank, white pine case, double walled, nursery. Built to last 20 years. Don't buy until you read our remarkable Incubator Book, written by the man who made the Racine. When you learn what he knows, you will want his machine, we think. The book is free. Write for it. Address Racine Hatcher Co., Box 88, Racine, Wis. Warehouses: Buffalo, Kansas City, St. Paul.

**PRACTICAL
POULTRY
RAISERS and**
Leading poultry experts say the many improvements in the new 1906 Pattern Standard Cyphers Incubator make it worthy the name "The Perfect Hatcher." Sold on 90 days trial, to prove that in convenience of operation; in economy of oil; in certainty of results; in large hatches and especially in strong and healthy chicks, it has never been equalled. Our new catalogue tells why. A poultry guide, 228 pages, (xxii) seven practical chapters, 500 illustrations, free if you mention this paper and send addresses of two persons interested in poultry.

Address nearest office.

Cyphers Incubator Co., Buffalo, N. Y.
Chicago, Boston, New York, Kansas City or San Francisco.

he bringeth it home and setteth it up in the cellar; but of the events incident thereto, behold, they are not written in these chronicles.

Howbeit she findeth the machine standing before her in its completeness and she discovereth that an incubator, like man, is "fearfully and wonderfully made."

At last all things being ready she filleth the tank with water, the lamp also she filleth with Standard oil and lighteth it; but she putteth not in the eggs until the second day. Then having regulated the machine perfectly, she putteth in nice fresh eggs, being happy in the assurance that none may molest or make afraid.

She turnmeth her lamp once each day, and twice each day she filleth it. She turneth the eggs also and cooleth them.

The fifth day she testeth the eggs. The fertile eggs she retaineth, but the unfertilized ones (tell it not to Gath) she taketh to the kitchen and beateth them into delicious custard pie.

Eighteen days does she keep her light brightly burning when she putteth in the moisture; for behold the artificial heat taketh away the natural moisture, nor giveth any in return.

Now she hath only to keep the heat regular until the twenty-first day, and lo! what a transformation! The eggs are broken and the cheeping, pecking, wondering little chickens overflow the machine.

Thus it is that the heart of the woman is filled with a great joy and she hath visions of wealth such as was never surpassed by a thrifty Kansas book agent.

She thinketh surely her trials are over, but she banketh overmuch on that which is uncertain, for she knoweth not yet how the tank may leak when the eggs have been in about ten days and how she must take out seventeen screws and cover the eggs with a shawl while she proceedeth to apply muriatic acid and solder to the leak. Nor does she know that sooner or later she must invest hard iron dollars in a copper tank ere her troubles are over. She knoweth not yet that the burner weareth out—price \$1—nor does she cipher on the possibility of Uncle John Do-em Rockefeller putting the price of oil up and up until the "helpful hen" seriously agitates race suicide. Nor hath she found from experience that the lamp smoketh.

Some morning she cometh down dressed as it were in purple and fine linen, for she goeth abroad in the land; when a terrible odor greeteth her from the lower regions where the incubator is located. She goeth in haste, and lo! and behold! the lamp smoketh and great is the smokiness thereof. Never before was lamp smoke so black, and never before was it so numerous. But she hath acquired the virtue of patience, so she straightway changeth her apparel. She changeth the lamp and learneth to not turn it up too high. These and many other things doth the woman do and learn; the whole, if I should write it I suppose would fill a book. But let us hear the conclusion of the whole matter.

I am persuaded, brethren, that the incubator doth the work of the hen, doeth it better, doeth more of it and doeth it with less trouble to both the old hen and the overworked housewife.

However, my brothers and sisters, I beseech you that you refrain from enumerating your infantile poultry, ergo the period of incubation be completed.

Feeding Quail.

The lesson of the great loss of life among quail occasioned by two severe winters has not been lost, says an official report. Perceiving the absence of food and shelter is the principal cause of mortality, State officials, game associations, and many private individuals have united in attempting to make good these deficiencies. Grain and other food have been distributed freely and systematically after heavy snowfalls, when the usual food is covered, and suitable shelter has been provided. Much activity prevailed last year in Illinois, Indiana, Massachusetts, Maryland, New Jersey, North Carolina, and West Virginia. Such measures are needed to preserve the quail from possible ultimate extinction; for with a growing army of sportsmen hunting them annually—an army that now numbers hundreds of thousands in this country—their ranks are each fall reduced so far below the normal that, if the succeeding winter happens to be severe, extermination of many colonies is almost sure to follow. Such a result is deplorable, owing to the great value of the quail to agricultural interests as a destroyer of insects and the seeds of weeds. Every farmer should feed quail about his place.

ON CREDIT.

The Celebrated Century Incubators. Cash or easy monthly payments. We trust honest people living in all parts of the world. The first hatch pays for the Incubator, gives you large profits besides. Write for free catalogue of Incubators and Brooders.

CENTURY MFG. CO.
Dept. 531
EAST ST. LOUIS, ILL.



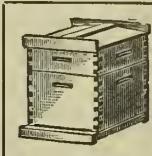
1906 PATTERN STANDARD CYPHERS

ORDER YOUR Cyphers Incubators

and POULTRY SUPPLIES from Topeka and save money. Everything the latest. Catalogue Free. Also get our catalogue of

Bee Keepers Supplies
with discount sheet for early orders.

Topeka Supply House
7th and Quincy St
Topeka, Kansas.

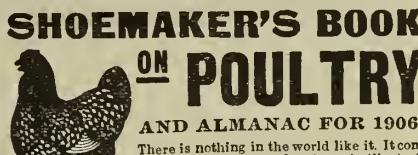


The "QUEEN" is not an incubator but the Incubator.

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA



AND ALMANAC FOR 1906.

There is nothing in the world like it. It contains 224 large pages, handsomely illustrated. A number of most beautiful Colored Plates of Fowls true to life. It tells all about all kinds of Thoroughbred Fowls, with life-like illustrations, and prices of same. It tells how to raise poultry successfully and how to treat all diseases common among them. It gives working plans and illustrations of convenient Poultry Houses. It tells all about Incubators and Brooders.

C. C. SHOEMAKER, Box 492, FREEPORT, ILL.

This 230 Egg Incubator

**\$12.75
ONLY**



We Pay the Freight

East of the Rockies.

Here's an offer never before equalled. The famous Royal Incubator

sold on trial, freight prepaid. Guaranteed in every way. Automatic control of heat and ventilation. Perfect hatches assured. Doubles your poultry profits. Don't pay more for smaller and poorer incubators. Get the best at freight-paid bargain prices. Investigate before you buy. Fine catalog of incubators, brooders, poultry and all supplies free. Booklet, "Proper Care and Feeding of Chicks," 10c. 60c poultry paper one yr. 10c. Royal Incubator Co., Drawer 66, Des Moines, Ia.



HOW TO BUILD AN INCUBATOR & BROODER

We will send complete, illustrated Peerless Incubator and Brooder plans free, showing how to

build your own machines at little cost. Anyone can do it. Also find illustrated catalog of incubators and brooder supplies. Write for both.

H. M. SHEER CO., Dept. 23, Quincy, Ill.

Take Your Own Time.

Old Trusty Incubator

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and no good chicks—why it is so easy to operate—why it is so economical. It's sold on 40, 60 or 90 days trial, freight prepaid. Write to us.

M. M. Johnson Co., Clay Center, Neb.

We Pay the Freight.

PROFITABLE POULTRY
Send 3c for our 64-page book, finely illustrated, that tells how to make money raising poultry. Others are doing it; why not you? This book gives full information on breeding, feeding, rearing and hatching. Illustrates and tells why Berry's "Biddy" incubators and brooders hatch and raise the largest per cent of chicks of any kind to buy. Contains cuts of our fine pure-bred poultry with prices of birds and eggs for hatching.

Berry's Golden Rule Poultry Farm, Box 68, Clarinda, Ia.

SEE THE 1906 RELIABLE
before you buy. Perfectly practical for poultrymen or beginners. Double heating system gives bigger hatches—saves one-third the oil. Sold on a money back guarantee. Write for free catalog. Reliable Farm Pure-Bred Birds and Eggs. Get prices. Reliable Incubator and Brooder Co., Box B-62, Quincy, Illinois, U. S. A.

The American Boy MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy," (1 year)..... 1.00
Kansas Farmer, 1 year..... 1.00

Total \$2.00

Both 1 year for..... \$1.50

Address,

KANSAS FARMER CO.,
Topeka, Kansas.

Dairy Interests

Butter-Making.
Mrs. Jerome Tice, before the Farmers' Institute at Berryton.

While the subject of this paper is a well-worn one, it can not fail to be of interest as long as butter is such a necessary article of diet. The ancient Greeks, while using milk and cheese, had no idea of butter. The Romans, however, used butter, but only as a medicine, never as an article of diet; and it must be confessed that some of the stuff sold to-day as butter would not make even good medicine. In the olden days butter was churned by shaking the cream in a bag made of skins.

Now we have the modern, up-to-date churn, of course in these days of skimming stations and creameries a great many sell their milk and thus avoid a good deal of extra work.

It is not the purpose of this paper to discuss which is the more profitable, to sell milk or make butter, but to tell how to make the best butter and market it at the highest market price. The writer has made butter for years, and has found this to be absolutely true: as good butter can be made from the milk of one cow as can be made from the milk of one dozen cows, provided the cream is taken care of. I have churned more than once in a gallon crock with a common stirring spoon and had gilt-edge butter. Persons intending to make butter for the retail trade should provide themselves with the following: A good separator, churn, butter-worker, print, scales, dairy thermometer, and a box of the best butter-paper. It is poor economy to try to get long without a good butter-worker, as they are such a saving of time and strength.

When the milk is brought to the house, strained and separated, the next step in making good butter is the proper care of the cream. Each skimming should be thoroughly stirred to get the animal heat out, and on no account should cool and warm cream be mixed. Some argue that better butter can be made from sweet cream, but I do not think so.

The cream should be kept in a warm place and stirred thoroughly every day till it ripens. When ripe it should be thick, smooth, and just acid enough to be pleasant to the taste. Churn at a temperature of 58 degrees F. in summer and 64 degrees in winter. When the butter has come in small globules stop churning and draw off the buttermilk. Wash the butter in the churn by pouring on a bucket of cold water and draining it off. Remove the butter to the butter-worker and salt it in the proportion of one ounce of salt to a pound of butter, using the best dairy salt. As the object of working butter is only to thoroughly incorporate the salt, have your print scalded and cooled ready for use.

Work the butter till you think the salt is well mixed in and no longer, as too much working breaks the grain and causes the butter to be oily. Good butter, when broken apart, should have rough, uneven surfaces and should not look slick. Wrap each pound as printed in a sheet of the best parchment paper. Provide yourself with a good tight box to pack the butter in preparatory to taking to market. Perhaps you had better take the butter yourself the first time, as women are proverbially the best talkers. Sell the butter the first time on trial, believing that after

a trial you will have a permanent customer. Be sure that every pound weighs sixteen ounces and be careful not to promise more than you can furnish. When you have established a reputation for the excellency of your butter, be very careful not to injure it in any way. If you can not supply your customers at all times, never try to sell them some one else's butter unless you tell them and they are agreed. To sum it all up, take care to always have a first-class article, and the strict observance of the golden rule is all that is necessary and you will find if these are observed you can not supply the demand.

Cost and Profit of Dairy Business.

A correspondent of Hoard's Dairymen has investigated the methods and the results attained by creamery patrons in Delaware County, N. Y. Following are his reports on some of the cases:

Herd No. 31.

Consists of 36 grade Jersey cows, fresh at different times through the winter.

Owner's estimate of the cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Hay (2 tons).....	\$20.00
Grain (800 lbs. cottonseed-meal and mixed wheat feed).....	9.60
Pasture.....	5.00
Total.....	\$34.60
Returns from creamery.....	\$56.98
Cost of feeding.....	34.60
Actual profit.....	\$22.38
Pounds of milk.....	4,416
Pounds of butter-fat.....	213.5
Price of butter-fat (including other solids).....	\$0.268
Price of milk per 100 lbs.....	1.21

Stables warm and light. All voidings of cattle held in tight gutters and hauled and spread as made. Thoroughbred hull is kept and heifer calves raised. Farmer enterprising and progressive. Takes and reads dairy papers.

Herd No. 32.

Consists of 20 grade Jerseys, fresh from February on.

Owner's estimate of the cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Hay (2 tons).....	\$20.00
Grain (500 lbs. cottonseed-meal, wheat, mixed feed).....	6.00
Pasture.....	5.00
Total.....	\$31.00
Returns from creamery.....	\$49.95
Cost of feeding.....	31.00
Actual profit.....	\$18.95
Pounds of milk.....	3,973
Pounds of butter-fat.....	169.8
Price of butter-fat (including other solids).....	\$0.294
Price of milk per 100 lbs.....	1.25

Stables warm and light. Manure drawn as made, keeps thoroughbred hull, raises heifer calves. Takes and reads farm papers, including Hoard's Dairymen.

Herd No. 33.

Consists of 41 grade Jerseys, fresh in fall and winter.

Owner's estimate of the cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Hay (2 tons).....	\$20.00
Grain, 5 months, 6 lbs.....	12.80
Pasture.....	5.00
Total.....	\$37.80
Returns from creamery.....	\$38.77
Cost of feeding.....	37.80
Actual profit.....	\$.97
Pounds of milk.....	2,238
Pounds of butter-fat.....	152
Price of butter-fat (including other solids).....	\$0.253
Price of milk per 100 lbs.....	1.73

Fine, large barns, with warm and light basement stables. Grade bull is kept, heifer calves raised. The owner of this herd is an invalid, and not able to give personal attention to his herd. Abortion has also refused the profits.

No farm papers are taken.

Herd No. 34.

Consists of 31 grade Jersey cows. Owner's estimate of cost of keeping a cow for a year, and the creamery record of returns, are as follows:

Hay (2 tons).....	\$20.00
Grain (900 lbs. cottonseed-meal, gluten and wheat feed, bran).....	11.70
Pasture.....	5.00
Total.....	\$36.70
Returns from creamery.....	\$40.01
Cost of feeding.....	31.70
Actual profit.....	\$8.31
Pounds of milk per cow.....	2,898
Pounds of butter-fat.....	143
Price of butter-fat (including other solids).....	\$0.279
Price of milk per 100 lbs.....	1.88

Warm and light basement stables; a

Sharples TUBULAR CREAM SEPARATORS

Will you buy a bad separator because the agent is a "good fellow"? Some people do. They should read this.

If You Have a Brand New Separator

not a Tubular, put it in the garret. We guarantee Tubulars to make enough more butter than any other separator, and from the same milk, to pay 25 per cent yearly interest on their cost. You test them free side by side. Your decision is final. Carnegie is using investments paying 6 per cent; here is a guaranteed 25 per cent to you. The waist low supply can—simple bowl—enclosed, self-oiling gears—are found only on Tubulars. Catalog T-165 explains it.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
TORONTO, CAN.
CHICAGO, ILL.

THE KANSAS FARMER

DE Laval

Are as much superior to other

CREAM SEPARATORS

As such other separators are to gravity settling systems

Send for 1906 catalogue and name of your local agent

THE DE Laval SEPARATOR COMP'Y

Randolph & Canal Sts.,
CHICAGO.
General Offices:
1213 Filbert Street,
PHILADELPHIA.
9 & 11 Drumm Street,
SAN FRANCISCO.
109-113 Youville Square
MONTREAL.
75 & 77 York street,
TORONTO.
NEW YORK.
14 & 16 Prince Street
WINNIPEG.

To You Who Milk and Sell Cream
There are Two RoadsTO
The Final Destination of Your Products

One is a Toll road.	The other is free.
One is a long road.	The other is short.
One is unattractive.	The other is beautiful.
One is full of obstacles.	The other is clear and smooth.
On one are many delays.	On the other is rapid transit.
On one the trip is expensive and tedious.	On the other the trip is economical and pleasant.
On one the trip is disappointing and you dread to repeat it.	On the other the trip is fascinating and you repeat it often.
One of these roads leads to failure.	The other to success.
At the end of one of these roads is a promise.	At the end of the other is the cash.
One of these roads is the old way.	The other is the "Blue Valley" way.

WHICH ONE ARE YOU TRAVELLING?
"BE SURE YOU'RE RIGHT, THEN GO AHEAD."

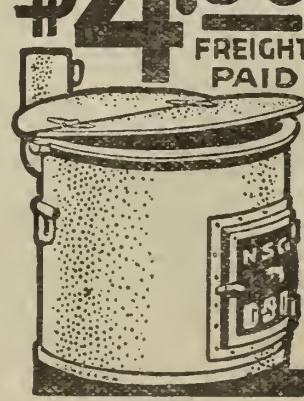
Send your Cream to us. Our system protects you.
Yours respectfully,

BLUE VALLEY CREAMERY CO.,

ST. JOSEPH, MISSOURI.

None, extra
large, ever

\$4.60 FOR THIS "ECONOMY" BOILER AND FEED COOKER



The "Economy" Feed Cooker is the best built cooker on the market today. It is constructed so as to get the very best results from the smallest amount of fuel possible. The kettle is well and securely bolted to the bottom cast iron and has a handle on each side so that it can be removed from the casing instantly. Will last a lifetime. The casing, or jacket, is one continuous sheet of cold rolled boiler steel supported at the bottom by a heavy wrought iron band. This cooker has the largest fire door of any made, and is the strongest, most serviceable feed cooker ever sold at such a price, freight paid. Made in seven sizes to suit every need; furnished with hinged cover, elbow and one length of pipe with damper. We guarantee this cooker for one year. Send money with order today, or write for our large 1,000-page catalogue giving other sizes and thousands of money-saving bargains for the farmer and his family.

If you want to save 10 per cent on everything you buy, we have a plan you should know about; it will save you from \$150 to \$250 a year. Only costs a stamp to find out all about it.

The object of this Society is to save money for its members. For full information let us tell you how we do it. Co-Operative Society of the National Supply Co., Lansing, Michigan, Chicago, Illinois

LIGHTNING PORTABLE WAGON and STOCK SCALE

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company.
121 Mill Street, Kansas City, Missouri.

grade bull is kept. Calves raised. The owner of this herd is a widow; farm work carried on with hired help. Agricultural papers are taken but no especial dairy paper.

Herd No. 35.

Consists of 45 grade Jersey cows. Owner's estimate of the cost of keeping a cow for the year, and the creamery returns, are as follows:

Hay (2 tons).....	\$20.00
Grain (6 lbs. of gluten and mixed feed).....	10.25
Pasture.....	5.00
Total.....	\$35.25
Returns from creamery.....	\$64.84
Cost of feeding.....	35.25
Actual profit.....	\$29.59
Pounds of milk.....	4,978
Pounds of butter-fat.....	214
Price of butter-fat (including other solids).....	\$0.40
Price of milk per 100 lbs.....	1.30

Stables are warm and light. Thoroughbred bull is kept; heifer calves are raised. Absorbents are used in gutter. Manure thrown out and hauled once a week. Farm papers are taken, including Hoard's Dairyman.

Herd No. 36.

Consists of 15 cows, Jersey grades, fresh in January.

Owner's estimate of cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Hay, 1½ tons.....	\$15.00
Grain (1,600 lbs. gluten and wheat mixed feed).....	19.20
Pasture.....	5.00
Total.....	\$39.20
Returns from creamery.....	\$47.85
Cost of feeding.....	39.20

Actual profit..... \$8.65

Pounds of milk..... 3,653
Pounds of butter-fat..... 174
Price of butter-fat (including other solids)..... \$0.22
Price of milk per 100 lbs..... 1.31

Stables are warm and light; all droppings of cattle saved in tight gutters and hauled and spread as made. Agricultural papers are taken, but no special dairy papers.

Herd No. 37.

Consists of 11 cows, Jerseys, grades fresh in spring.

Owner's estimate of the cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Hay (2 tons).....	\$20.00
Grain (wheat and cornmeal feed).....	10.00
Pasture.....	5.00
Total.....	\$35.00
Returns from creamery.....	\$54.96
Cost of feeding.....	35.00

Actual profit..... \$19.96

Pounds of milk..... 4,057
Pounds of butter-fat..... 221
Price of butter-fat (including other solids)..... \$0.24
Price of milk per 100 lbs..... 1.35

Stable is fairly warm. A grade bull is kept, and heifer calves raised. An exceptionally good pasture has contributed to the profit made on this herd. No farm papers are taken.

Hay, 1 ton.....	\$10.00
Ensilage equal feeding-value.....	10.00
Grain (700 lbs. wheat mixed feed, cottonseed-meal and gluten).....	8.40
Pasture.....	5.00
Total.....	\$33.40
Returns from creamery.....	\$54.10
Cost of feeding.....	33.40

Actual profit..... \$20.70

Pounds of milk..... 2,652
Pounds of butter-fat..... 186
Price of butter-fat (including other solids)..... \$0.29
Price of milk per 100 lbs.....

Herd No. 38.

Consists of 33 grade Jersey cows, fresh from October on.

Owner's estimate of the cost of keeping a cow for the year, and the creamery record of returns, are as follows:

Stables are warm and light. All droppings of cattle saved and drawn and spread daily. Thoroughbred bull is kept, and heifer calves raised. General farm papers are taken, but no special dairy paper.	
Herd No. 39.	
Consists of 18 grade Jersey cows; fresh in January, but more in February and March.	
Owner's estimate of cost of keeping a cow for the year, and the creamery record of returns, are as follows:	
Hay (2 tons).....	\$20.00
Grain.....	7.00
Pasture.....	5.00
Total.....	\$32.00
Returns from creamery.....	\$39.24
Cost of feeding.....	32.00
Actual profit.....	\$7.24
Pounds of milk.....	3,143
Pounds of butter-fat.....	187
Price of butter-fat (including other solids).....	\$0.40

Starting right is usually considered half the battle in breeding any kind of pure-bred stock and to those who are contemplating a first purchase we say, attend this sale. To those who need new blood lines we also say, attend this sale. Catalogues can be had in exchange for a line to J. F. Stodder, Burden, Cowley County, Kansas. Remember that the sale is February 22, and that the place is Riverside barn, one block west of Missouri Pacific Depot, Wichita, Kans.

other solids)..... \$0.28
Price of milk per 100 lbs..... 1.24

Stable fairly warm. Manure all saved, and drawn and spread as made. Grade bull is kept; heifer calves raised. No dairy papers are taken.

Herd No. 40.

Consists of 28 grade Jerseys, fresh any time.

Owner's estimate of the cost of keeping a cow for a year, and the creamery record of returns, was as follows:

Hay (2 tons).....	\$20.00
Grain (1,650 lbs. wheat, cornmeal, gluten, cottonseed-meal).....	25.35
Pasture.....	5.00

Total..... \$50.35

Returns from creamery..... \$86.97

Cost of feeding..... 50.37

Actual profit..... \$36.60

Pounds of milk..... 4,802

Pounds of butter-fat..... 281.3

Price of butter-fat (including other solids)..... \$0.27

Price of milk per 100 lbs..... 1.54

Stables are all that could be desired as to warmth and light. Manure all saved and applied as made. Thoroughbred bull is kept and heifer calves raised.

Dairy papers are taken and read.

Each patron received for \$1 invested in feed as follows:

No.	Received.	Per cow, Profit.
31.	\$1.64	\$22.38
32.	1.61	18.95
33.	1.02	.97
34.	1.26	8.31
35.	1.83	29.59
36.	1.22	8.65
37.	1.57	19.96
38.	1.61	20.70
39.	1.22	7.24
40.	1.72	36.60

It is a common practice among the patrons of this creamery to skim a portion of the milk and send the cream. This accounts for the comparatively small amount of milk as compared with the butter-fat.

Stock Interests

YOU CAN'T AFFORD TO MAKE A MISTAKE

ISN'T THIS WHAT YOU WANT?

1. The separator that will get all the cream without impairing its quality.
2. The separator that will be the easiest on you—easiest to turn and easiest to wash.
3. The separator that is the easiest to care for.
4. The separator that will last the longest and require the fewest repairs.
5. The separator that is really the most economical.
6. The separator that has an old-established, reputable manufacturer behind it.

Now, then; we claim that the Omega Cream Separator is the only separator that meets all those demands.

We claim that it is the most economical, the easiest to wash, the simplest to care for, the easiest to turn, the most durable and that it will last longer with fewer repairs than any other.

WE PROVE OUR CLAIMS—All we ask of you is a chance to prove that every claim we make is true. If you'll let us we'll set up an Omega on your own farm without money and without price, in order that you may give it

AN ABSOLUTELY FREE TRIAL

If you don't think it greatly superior to all others—if you are not perfectly satisfied with it—don't keep it. The trial costs you nothing. Are you willing to give it a trial? Don't you owe it to yourself to investigate our claims? They mean a big saving to you in time and money. Write today for catalog.

THIS BOOK FREE TO YOU—New book, "More Milk Money," tells how to care for separator cream; how to make good butter; how to select good dairy cows; how to prevent white specks in butter; how to wash and work butter, and a hundred other things you ought to know. Free if you mention this paper, tell how many cows you keep and give address of a neighbor who keeps cows.

The Omega Separator Co., 23 Concord Street, Lansing, Michigan.

**DAVIS LOW DOWN SEPARATOR**

Goes direct from factory to you. No state agents or traveling salesmen to pay. Straight factory prices. And it's absolutely the

Easiest to clean, easiest running, simplest separator on earth. We guarantee that with a Davis your profits will increase \$10 per cow while cutting your labor in two. Freight prepaid. Send for money saving catalog No. 125 right now and investigate.

DAVIS CREAM SEPARATOR CO.

540 North Clinton St., Chicago, Illinois.

The Dairy Problem Solved, and Solved Rightly.

Since man first began to milk cows, the problem of how to make the most dollars from them has been up for solving. After centuries of experiment the way has been discovered.

An Easy Running Empire Cream Separator

will get these dollars for the cow-owner, and will get them all. This is an experiment proven by years of experience by farmers the country over.

You want to know why; we want to tell you why. Write, and get our free books on dairying. Read these; then investigate the Empire. The result can only be one thing, a complete proof that our statements are true.

Empire Cream Separator Co., Bloomfield, N. J.

Temple Block, Kansas City, Mo.

IT WON'T COST YOU ONE CENT.

The Grain Belt Harrow Carl Pays For Itself in One Season.

Why wear yourself out dragging behind a harrow in the dust and over the clods,—when you can ride for nothing,—do more work in a day and better harrowing. It's all in the proposition we have to make you.

WRITE US TO-DAY FOR OUR FREE BOOKLET.

Write the

WATERLOO HARROW CO.,

982 Bridge St., Waterloo, Ia.

TREES Small Fruits & Nursery Stock

DIRECT FROM THE NURSERY

At Wholesale Prices. You get what you order, and save half your money. Lists Free.

JOHN F. DAYTON, WAUKON, IOWA.

VETERINARY COURSE AT HOME.

\$1200 per year and upwards can be made taking our Veterinary Course at home during spare time; taught in English; Diploma granted; positions obtained successful students; cost in reach of all; satisfaction guaranteed; particular care.

ONTARIO VETERINARY CORRESPONDENCE SCHOOL, Dept. 17, London, Canada.

DETECTIVES

Breed men wanted in every community. Train under instruction; previous experience and knowledge. Send for free book of Detectives.

GRANTED A DEDICATED LIFE IN HONORABLE CRAFTSMANSHIP.

stallions and successful brood mares. The terms are liberal and the guarantee the strongest. The horses will be ready for inspection several days before the sale and we advise that you come and look them over carefully. You will think more of them after you see them—and you know what you are bidding on before it gets into the ring. We will both profit by this effort. Let us get together on the 24th."

Northern Kansas Swine-Breeders.

The following is the program of the meeting of the Northern Kansas Poland-China Breeders' Association, which will meet in Clay Center, February 22, 1906, at 1 o'clock p.m.:

Invocation.

Address of welcome, Mayor Geo. W. Hanna, Clay Center.

Response, Howard Reed, Frankfort.

President's annual address, J. J. Ward, Belleville.

"The Breeder as the Farmer Sees Him," R. E. Shadie, Green.

"The Farmer as the Breeder Sees Him," H. B. Walter, Wayne.

Discussion of papers, L. L. Warner, Longford; W. A. Davidson, Simpson.

Score-card judging of Poland-China swine, Prof. G. C. Wheeler, Manhattan.

Appointment of committees.

Evening Session.

"The Fellowship of Breeders," R. F. Norton, Clay Center.

"How to Raise the Standard," Harry Thompson, Marysville; L. W. Hamilton, Kearney, Neb.

General discussion.

"Laying the Foundation for a Herd," E. E. Axline, Oak Grove, Mo.

General discussion.**February 23—Morning Session.****Business meeting.**

"Treating for Cholera," Frank Winn, Mastin.

Afternoon Session.**A Successful Public Sale—**

(a) From the Fieldman's standpoint—Grant Gaines, Topeka.

(b) From the Auctioneer's standpoint—L. R. Brady, Manhattan.

(c) From the Breeder's standpoint—F. A. Dawley, Waldo.

General discussion.

"The Philosophy of Judging," F. M. Lail, Marshall, Mo.

A hog-judging contest by the members.

Evening Session.

"The Relation of Feed and Exercise to the Perfect Development of the Hog," Prof. H. R. Smith, Lincoln, Neb.

"The Most Profitable Type for the Farmer, Breeder and Packer," A. B. Garrison, Beattie.

General discussion.

Miscellaneous business.

Committee on arrangements—J. R. Johnson, C. W. Dingman, and G. W. Crooks, Clay Center; J. J. Ward, president, Belleville; L. D. Arnold, secretary, Enterprise.

Ward's "Attraction" Poland-China Sale.

One of the best bred-sow sales to be held this season will be the "Attraction" sales to be made by J. J. Ward & Son at their farm 2½ miles south of Belleville, Kans. These gentlemen have been good buyers at the best sales for several years, always buying the best of the large, heavy-boned type. They have always kept the best of their own raising and as a result are enabled at this time to offer to the public one of the best collections of bred sows that have ever gone under the hammer in that part of the State. The offering will all be bred, a part of them to the great and much-talked-of boar, Skybo, the boar that Messrs. Ward have recently purchased of Mr. Lail for a long price. Skybo was sired by Grand Chief, dam Juanita, one of Mr. Lail's greatest sows. She has produced State-fair prize-winners in each of her last four litters. Skybo was shown at the Illinois State Fair last year and won third in class and headed the young herd that won first, the same litter winning second and third. The remainder will be bred to the good breeding boar, Wonder's Perfection 2d, half brother to Victor X. L., the boar that won at St.



Nemo L's Dude, the great Poland-China herd boar belonging to John Bollin, Leavenworth, Kans., is the progenitor of all Dudes and the sire of more than 100 State Fair, American Royal, and World's Fair prize-winners. In the great sale to be held by Bollin & Aaron at Leavenworth, Kans., on February 22, 1906, there will be sold 25 sows bred to this great \$1,000 boar. This will be the best offering ever made in Leavenworth. Address John Bollin or Gus Aaron, Route 5, Leavenworth, Kansas, for catalogue.

Louis. While there are a lot of mighty fancy bred and splendid stuff included in the sale, some of it is right up close to the fountain head. Three great sows will be offered at this sale, Expansioness, May Expansion, and Expansion Lady, all three great, big, heavy-boned sows and just in their prime as breeders. Others offered are Pansy Blossom, a litter sister to Coquette 93829; Mischievous Fanny 91760 by Mischief Maker and bred to Nonpareil; Keep Sake 91759 by Meddler 37380 bred to E. L. 2d; and Olive 91761 by Woodbury 33858 bred to Rollin's Chief, he by Chief Perfection 2d. Send for catalogue and make your arrangements so you can attend this sale. If you are unable to attend send bids to C. E. Shaffer of the Kansas Farmer.

The Kansas City Hereford Sale, February 28 and March 1.

The breeders consigning to this sale are all members in good standing of the Hereford Association, and have combined at this time to make what they believe will be the most important sale of the season.

Each breeder is putting forward some of his very best animals, and this will be an opportunity for those contemplating buying to secure some of as good blood as there is to be found in the herd book, and to secure it at no exorbitant price.

It will be a good time to buy for the reason that the cattle will not have to be carried long on feed until grass comes, and the buyer will get the benefit of the good care that has been taken of them by their owners.

Knowing for quite a long time that this sale was to be made, each of the contributors has taken good care of his animals, to the extent that none of them have in any way been stunted, but are all large for their age and are good, growthy, healthy individuals.

It will be a good opportunity for the ranchman who is desirous of securing a carload, as nearly half the animals

catalogued are bulls, and every one is of serviceable age, so that no time need be lost, but all can be put to immediate service.

Every animal is thoroughly guaranteed, and the sale will be conducted in a strictly honorable and business way.

As will be seen by the catalogue, quite a number of the females are in calf to excellent sires.

Cattle are going to be higher in the very near future, so if you have been thinking of buying, do not delay longer.

You are cordially invited and are urged to attend this sale.

Should you desire any further information relative to the same, write Secretary C. R. Thomas, 221 West 12th St., Kansas City, Mo.

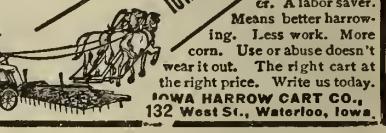
"You Must Show Me."

The above sentence is heard so frequently in business that we have come to believe that it is evident that it must have some deep meaning behind it—something that stands at the very foundation of the business relations between man and man. If you boy drops into a New York or Chicago business house and asks for a job, the manager's first words are: "Yes, you can go to work but you will have to show me." In other words, the boy must prove his value before his salary is fixed. If a tracing man for some big farm implement house calls on a dealer in your town, the dealer says: "Yes, I'll try your drills but you must show me or give me back my money. If they sell well and stand the wear, I will want your line."

This idea of "satisfaction or money back" is getting to be almost entirely the basis on which legitimate manufacturers do business. It is their way of proving their confidence that their product will "make good." For some reason this "honor plan" of selling goods has never been applied to the sale of groceries and the various food-stuffs used on the farm. But we advertise in this issue the new idea as applied to the sale of a poultry food

The Farmers Road To Wealth

In adopting up-to-date ideas and implements, the 1906 idea in the way of an implement is the



IOWA HARROW CART

A money saver. A time saver. Means better harrowing. Less work. More corn. Use or abuse doesn't wear it out. The right cart at the right price. Write us today.

IOWA HARROW CART CO.,
132 West St., Waterloo, Iowa.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

which is guaranteed to make hens lay and is sold with the express provision that if it fails you get your money back. This food is called Security Poultry Food and is put out by the Security Stock Food Company of Minneapolis, whose goods are famous throughout the United States as being sold exclusively on the plan of giving every man his money's worth or his money back and letting him be the sole judge. Ask your local dealer to "show you" their guarantee.

Main's Poland-China Sale.

When James Mains, of Oskaloosa, Kans., announces a Poland-China sale the breeders of the West understand that there will be something doing. This time the sale will be held at his farm on February 28, 1906, and includes 70 head. A number of these were sired by Empire Chief by Chief Tecumseh 2d 20740. Two-thirds of the offering has been bred to Roller Trust 37010 by High Roller 37009, champion of Ohio and the sire of many prize-winners, including 19 at the World's Fair.

Roller Trust is an extra smooth, stately hog with broad fancy head, fine tip ear, fine, smooth coat of hair, splendid heart girth, strong, broad back, extra good hams, strong, heavy f' length, and a breeder of litters. He is assisted by Corrector 2d, Meddler, and Harmonizer boars. Over half of Mr. Main's reserve brood sows are included in this sale. Mention the Kansas Farmer and write for catalogue.

An Opportunity for a Good Investment.

The Kansas Farmer desires to call attention to the real-estate advertisement of Albert King, of McPherson, Kans., which appears in this issue. The land advertised by Mr. King is entirely under his control and can not be purchased by any one except through his agency. This land consists of scattering quarter sections in different parts of Sherman County, and in most cases they adjoin highly improved farms, are close to schools and churches, and in good communities.

If any one wishes more land than Mr. King has in any one body, he will buy the adjoining land and allow the purchaser to pay for it in small payments. This offers a splendid opportunity to any one seeking investment to buy this land, making a small payment down and holding it for higher prices, or to any one who desires to make a start at this time towards owning a home. Mention the Kansas Farmer and write him to-day for full particulars.

Lincoln, Nebraska, Is Proud of the Queen.

The Pinkerton Manufacturing Company has an enviable reputation in the incubator field and the people of the Capital City are justly proud of the Queen Incubators and Brooders made by this company. This company with its extensive plant and modern equipment is one of the big enterprises of Lincoln, Neb.

In a remarkably short time the Queen Incubators and Brooders have become



Gaffine 34796, full brother to grand champion mare at World's Fair. Second prize winner at Kansas and first prize winner at Colorado State Fair. Color, black. Weight, 1,850, and one of the attractive offerings at the Avery closing-out sale at Manhattan, Kans., Saturday, February 24, 1906.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas.

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectual advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptables references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

RED POLLED BULLS FOR SALE—At moderate prices. If you want a fine young one that will be hard to beat for size, color and shape, I have eight head, 9 to 12 months old, and several younger ones, all registered. All are sired by the 2,450 pound bull, Butterfield 3410. Would spare a few heifers. Write or come and see them. Otto Young, Utica, Kans.

GALLOWAY BULLS—4 head, 18 to 18 months old, suitable for service. All registered. Address, C. A. Kline, R. F. D. Tecumseh, Kans.

FOR SALE—Pedigreed Shorthorn bull, 3 years old; Master Duke 2d 201080. Good color, good individual. Can be seen on farm at Hoyt, Kans. W. E. Barker in charge. Can not use longer in herd. Case Broderick.

FOR SALE—Hereford bulls, choice and blocky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, Peck, Sedgewick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

HOLSTEINS—Bull calves, 3 to 8 months old, one yearling, extra choice. H. B. Cowles, Topeka, Kans.

PEDIGREED SHORTHORN BULL—3 years old; sire Magenta, who cost \$1,100 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Violist Prince No. 145647. Has been at the head of our herd as long as we can use him. An extra animal. H. W. McAfee, Topeka, Kans. (2 miles west of Kansas Ave. on 6th Street road).

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 Ranch, Bilss, O. T.

FOR SALE—One straight Cruickshank bull, 14 months old, dark red, extra good animal. H. W. McAfee, Topeka, Kans.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Blvd., Kansas City, Mo.

FOR SALE—Registered Jersey cattle, Two yearling bulls. Sires. A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (Imported), grandam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for 2 years. Her 4 dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kans.

SWINE.

FOR SALE—25 Duroc-Jersey boars, large enough for service and 60 gilts, open or bred. Pigs strong boned and best of color. Prices low. A. G. Dorr, Route 5, Osage City, Kans.

FOR SALE—Bred O. I. C. gilts and some good boars. All good stock. A. W. Thoes, Inman, Kans.

FOR SALE—20 good, strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

FOURTY HEAD of pedigree Duroc fall pigs; good color, well built. Write to Chas. Dorr, Route 6, Osage City, Kans.

BOARS FOR SALE—9 Poland-Chinas of March farrow. Select pigs reserved for sale which was postponed. Address W. L. Reid, Route 4, North Topeka, Kans. Phone 433, via Merden.

HORSES AND MULES.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Clark City, Kans.

AN IMPORTED registered Percheron stallion, 8 years old, sound, color black. First class horse in every respect. Call or write J. H. French, 718 Kansas Ave., Topeka, Kans.

FOR SALE—One 8-year-old jack, fine breeder and performer; his get is No. 1. Also two young jacks for sale cheap, or will trade for a good draft stallion. Address Joseph Pizchner, Box 14, Olmitz, Kans.

FOR SALE OR TRADE—Three fine draft stallions, one Shetland stallion, two good jacks. G. J. Price, Richmond, Kans.

FOR SALE CHEAP—One gray registered Percheron stallion. Sound and all right. A. W. Thoes, Inman, Kans.

If you want a Percheron, Belgian or saddle stallion, write to Chas. Guffin, Rydal, Kan.

HORSES AND MULES.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

FOR SALE—The black imported Percheron stallion Bonneval 23072, 8 years old, weight 2,000. Come and see him and his get, ranging from 6 months to 3 years of age. Munden Percheron Horse Co., Munden, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swayed back. Suitable reward for return. J. W. Gillard, 836 Highland Avs., Topeka, Kans.

POULTRY.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

FINE Barred Plymouth Rock cockerels for sale at \$1 each. Henry Bond, Rossvills, Kans.

BUFF COCHINS—25 rich colored, heavy feathered cockerels and pullets, half price. Eggs \$2 per 15; \$3.50 per 30. Imperial Pekin drakes \$1 each. H. A. Thomas, Scranton, Kans.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kans.

FOR SALE—Whites Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kans.

MY R. I. REDS won seven prizes on eight entries at Kansas City Circular. H. C. Kellerman, 3516 Swart Ave., Kansas City, Mo.

S. C. B. LEGHORNS—Some choice cockerels for sale; \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kans.

WHITE WYANDOTTE COCKERELS for sale; from prize-winning birds. Orders for eggs taken now. \$1.50 per 15. Mrs. John W. Smith, Lawrence, Kans.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kans.

PURE-BRED Barred Plymouth Rocks at reasonable prices. J. A. Sawhill, Edgerton, Kans.

SEEDS AND PLANTS.

OATS WANTED—A car of Texas red oats, good quality, clean and free from must; prefer grown south of Kansas line. Send sample and price. Geo. Mantaldo, Columbus, Kans.

SMALL FRUIT PLANTS—For price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Sons, Route 9, Lawrence, Kans.

PEDIGREAED SEED-CORN—Raised from Funk Bros.' high-bred Boone County ("Special") White. The seed from which this corn is grown cost me \$5 per bu. It is now acclimated to Kansas. Select ears for sale at \$2 per bu. Address Edwin Taylor, Edwardsville, Kans.

FRUIT TREES half price, best quality. Catalogue free. Baldwin, Seneca, Kans.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35¢; 1,000, \$2.25. Raspberry, 100, 70¢; 1,000, \$6. Blackberries, 100, 70¢; 1,000, \$5. Grapes, 2 year, 5¢. Currants and gooseberries, per 10, 50¢. Asparagus, 100, 40¢; 1,000, \$2.25. Rhubarb, 10, 30¢; 100, \$2.25. Gladiolus bulbs per 10, 10¢; 100, 75¢. Dahlias, each, 10¢; 100, \$5. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Springs Nurseries, Bonner Springs, Kans.

FOR SALE—Speltz, 50 cents; Macaroni wheat \$1 per bu. f. o. b. Wheeler & Balwin, Delphos, Kans.

FOR SALE—Spring of 1906 sand sweet potatoes, six kinds. Prices on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety."—Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State corn-breeders' contest 1906, won 1st and 2d prize for the most productive acre-103 and 78½ bushels. Write to C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

ANNOUNCEMENTS.

GEO. A. HURON is a candidate for the office of Probate Judge of Shawnee County, subject to the Republican primaries.

BY WRITTEN REQUEST of many voters of the Thirty-seventh Representative district, I hereby announce my candidacy as representative from Shawnee County, subject to the primaries of March 10, 1906.

A. E. DICKINSON.

I HEREBY announce myself as a candidate for the office of County Treasurer of Shawnee County, subject to the Republican primaries.

G. W. VEALE.

YOUR BALLOT solicited for Register of Deeds at the Republican primaries.

ROOSCOE C. SQUIER.

SUBJECT to the Republican primaries to be held March 10, 1906, I am a candidate for re-election to the Legislature from the Thirty-ninth district, which comprises the Sixth precinct of and additions to the Second ward, all of the Fifth and Sixth wards of Topeka, and all of the country south of the river.

ROBERT STONE.

HELP WANTED.

WANTED—Married man to work on dairy farm. Good, permanent place for right man. R. J. Linscott, Holton, Kans.

WANTED—Farm hand, married man, to work by the year; house furnished, cow, wood for fuel, garden plot, privilege to keep chickens, and good wages. T. P. Jones, Olpe, Lyon County, Kans.

WANTED—Man and wife to work on farm; will rent to right parties. Sarah F. Harris, Lecompton, Kans.

FARMS AND RANCHES.

CASH for your real estate or business, no matter where located. If you want your property sold quickly send us description and price. N. B. Johnson & Co., 517 Bank Commerce Bldg., Kansas City, Mo.

FOR SALE—One-quarter section near railroad town; to lease. One-half section near county seat Wichita County, Kansas. Ulrich Schwartz, Anacortes, Wash.

832 ACRE FARM, McPherson County, 3½ miles from good town, close to school, 210 acres first bottom, remainder second bottom, up-land, meadow and pasture, excellent improvements, including fence, house, barn and out-buildings; fine bearing orchard, alfalfa, excellent water and timber. Price \$22 per acre. C. E. Carlson, Odd Fellows Building, McPherson, Kans.

FARMS AND RANCHES.

A GREAT BARGAIN—A fine 240 acres farm in Wabaunsee County, 50 acres in wheat, 45 acres in alfalfa, 50 acres in grass, balance in cultivation, first class corn land. Eight room frame house, corn crib, granary, barn for 8 horses, stots cattle shed 100 feet long and other buildings; well fenced, never falling wells, with windmill, piped to barn and feed yards with hydrant attached, elevated tank; 100 bearing fruit trees. Located in the house, three miles south of Belvieu, Kansas. Can sell on very easy terms. For further particulars write or address J. B. Fields, Real Estate and Loans, Alma, Kans.

TO TRADE for stock, good 160-acre farm in Cherokee County. H. H. High, Faulkner, Kans.

READ, CONSIDER, COME, OR WRITE 80 acres of good land, with nics, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres, improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realy Co., Clay Center, Kans.

A BARGAIN—160 acre farm, 80 in cultivation, balance pasture; 5 room house with cellar, new barn 3x50. Also cattle-shed, corncrib, granary, hen house, and implements shed, well, windmill, orchard; 1½ miles to school 3½ miles to Alta Vista, in Wabaunsee County. Price \$5,600. A. H. Meseke, Alta Vista, Kans.

KANSAS FARM LANDS for sale in Republic and Washington Counties, 180 miles from Omaha, St. Joe and Kansas City, located in the corn and alfalfa belt, where the farmer has got rich by feeding hogs and cattle and selling out to live a retired life; for prices and description of improved farms, write to J. E. Caswell, Belleville, Kans.

ANOTHER GOOD FARM FOR SALE—I am offering for a short time the following described farm for sale: 160 acres one-half mile south of Paxico, 145 acres in cultivation, 5 acres in fine orchard with all kinds of fruit, 5 room frame house with fine cellar, also a two-room tenant house, new barn 40x60, windmill and well with everlasting water at the barn, good well at the houses, 5 acres hog pasture well fenced, 10 acres timothy, 15 acres blue-grass pasture, 15 acres alfalfa, good feed lot, a small stream running through the feed lot with an abundance of good water. Price \$7,000 to be paid as follows: \$3,000 cash, balance to suit purchaser with interest at 6 percent per annum. J. E. Fields, Real Estate and Loans, Alma, Kans.

MORRIS COUNTY LAND—640 acres of fine land—adjoining railroad town, 500 acres of which is first class farm land; no buildings; price \$10,500. 320 acres good land, half in cultivation, 5 room house, new barn, only 3½ miles out; snap, \$7,500. Splendid ranch 480 acres—300 in cultivation—10 room house, barn, spring in corral, steel mill; alfalfa. Price \$13,000. Easy terms, 8,000 acres. Finest ranch in the county. Will sell by quarter, half or section. Apply to John Taggart & Son, White City, Kans. Mention Kansas Farmer when writing.

WANTED—To rent small farm, eastern Kansas preferred. Owner to retain house and board party, furnish stock, implements and a low tenant share of stock and crop. Best of references furnished. Address K. C. T., 4115 Farnam St., Omaha, Neb.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quesenberry, Marion, Kans.

FOR SALE—320 acre well improved farm, 6 miles from Emporia, Price, \$25 per acre. Write Hurley & Jennings, Emporia, Kans.

A 320-ACRE FARM within two miles of good town. Good new house, barn and stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; good fish pond near the house with plenty of fish. J. Balmum, Arlington, Kans.

FARM WANTED—A good farm within 5 miles of Topeka, 160 to 320 acres. Prices reasonable. Buyer means business. Address L. L. care Kansas Farmer.

FOR RENT—Fine rice and alfalfa farm, near Houston, Texas. Address Dr. F. M. Willes, Indianapolis, Ind.

BUY FROM OWNER—This fine alfalfa and sugar-beet farm, near school and town, only 6 to 12 feet to inexhaustible supply of sheet water; a bargain for quick sale. James A. Jackson, Syracuse, Kans.

10-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmett, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

KANSAS IMPROVED STOCK-BREEDERS' ASSOCIATION SIXTEENTH ANNUAL MEETING.

(Continued from page 161.)

State fair for side-shows than for a monkey-show in a Sunday School.

Mr. Glick: I desire to move that our association return their thanks to our worthy secretary, Mr. Heath, and his assistant, Mr. Graham, for the able and efficient work they have done for this association, and also our thanks to our worthy president and his assistant for the able and fair manner in which they have presided over the deliberations of this body. Motion carried.

Mr. Vincent, of Hutchinson, was introduced and made some remarks regarding a new hog-cholera remedy.

GENERAL DISCUSSION.

Mr. Westbrook was called for for some remarks on the Standard-bred horse.

Mr. Westbrook: This is very unexpected to me. I want to say to you gentlemen that listened to that paper this morning, that was the best paper I ever heard on imported horses. The gentleman gave a good talk and a good paper. But I want to call your attention to the fact that he gave you the other side. We will give you the amusing side, the pleasure part. I do not believe I am looking at a man but has a buggy and a buggy horse, and that horse does not weigh 2,000 pounds. Take a Standard-bred horse and see the intelligence, and what a pleasure it is to own one, and what a pleasure it is to see your boys driving them and riding them.

Mr. Kirkpatrick: I am glad that Mr. Westbrook is keeping up his courage in producing horses for the amusement of the people of the country. But he has overlooked one thing in the passing of that horse into the automobile.

Mr. Westbrook: He is entirely mistaken. Now, excuse me. Nobody that likes horses wants an automobile. Men in our town that own automobiles don't own much land.

A Member: I think he has started something going when he advises the farmers of the State of Kansas that the way to keep their boys on the farm is to supply them with a trotter on the farm. The trotting horse has ruined thousands of them. I tell you a good Percheron horse or mare never ruined a young man. I am proud to say I gave one to my son.

A Member: I keep this Standard-bred horse for pleasure.

A Member: I would like to say one word in behalf of the Percheron horse. We want something besides sporting horses; we want something that can do the work. I have a pair of Hambletonian mares, but the Percheron horses do the work.

Mr. Westbrook: A good, serious-looking gentleman has got up here and made out that I was talking about sporting horses. I don't want any one to get the impression that a man has got to be a sporting man to own a Standard-bred horse.

NEEDED INFORMATION.

Mr. Gentry: I only want to take just a minute. I think it strange in this large audience that the Missouri mule has not found a friend.

A Member: I have been through quite a number of Missouri counties and noticed the splendid mules they are raising in that country. In fact, mule-raising is one of the greatest industries in that State. I was told a few weeks ago that mules are higher now than they have been since the Civil War. I told them Kansas is now raising some as good mules as are raised in Missouri.

Mr. Gentry: I did not mean to say that I was not a friend of the driving horse.

Mr. Robison: I have been listening to this discussion with a good deal of pleasure. I chanced to be over at Mr. Gentry's fair in Missouri, and the largest jack-grower in that State, and one of the most successful, said: "I wish you would send a thousand of that kind of horses into Missouri so that we can get some good horses to raise mules with." How are you going to get your Missouri and Kansas prize-mules without horses to produce that kind? We have got to get the bone, the muscle, and the squareness. We can not get it without getting a draft build into that mule.

Mr. Wellhouse: The finest pair of mules that I have ever seen were over here at McAfee's; he's too modest to tell about it.

Mr. McAfee: My mules came from Louisville, Ky., and they were bred from high-grade Standard-bred mares.

Mr. Avery brought up the subject of registration of Percheron horses in the United States, and after considerable

discussion the following motion was made by Mr. Heath:

"That we recommend to the Percheron associations that in the interest of the Percheron horse they speedily get together in one acceptable registry association."

Motion carried.

Mr. Heath: Before we adjourn I want to take this occasion on behalf of myself and Mr. Graham, assistant secretary, to express our appreciation for the vote of thanks. We do not feel that there is a great deal due us, for the reason that we are both very busy men, and what we do for this association is in the nature of extra work. I simply say that where mistakes occur we are always glad to correct them. If you find anything wrong in your account, or anything else, if you will take it up with us we will gladly correct it.

Pasturing Pigs on Stubble-Fields.

BY A. C. TRUE, DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

When grain is harvested some necessarily escapes the reaper and is usually lost. While this amount may hardly be sufficient to make it profitable to follow the reaper with a rake, the scattered grain may be profitably utilized by turning pigs or other stock into the stubble-fields, and as a matter of fact the custom of pasturing stock on such fields is quite common in many regions.

Some interesting experiments have been made at the Montana Station to learn the value of this as compared with other methods of feeding. Forty-one pigs from 6 to 9 months old were allowed the run of barley-, wheat-, and pea-stubble-fields, of 18, 10.44, and 10.73 acres, respectively. For some time before the test they had been pastured on alfalfa and fed 1 pound of cracked barley per head daily. For 10 weeks immediately preceding the test they made a daily average gain of 0.42 pounds per head. While pastured on the stubble-fields they were given no grain in addition to what they could find except on stormy days. The grain thus fed amounted to 24.1 pounds in the 5 weeks of the test.

During this time the pigs made a gain of 22.8 pounds per head, or 17.5 pounds, deducting the amount which it was calculated they gained from the grain fed during stormy weather. On the supposition that 4.5 pounds of grain are required to produce a pound of pork, 41 pigs gathered 3,228.75 pounds of grain, which otherwise would otherwise have been lost. The harvesting had been done in the usual manner, and in the investigator's opinion the amount of peas and grain remaining in the field did not exceed that left in the stubble-fields on the average farm. The scattered grain could not have been saved in any other way, and represents a clear profit.

The grain saved from the stubble-fields by these pigs was not all that could have been gathered if they had remained in the fields a longer time. Seven brood sows were afterwards pastured during the winter on the station stubble-fields, which included a 24-acre oat-field in addition to those mentioned above. They were given no food in addition to what they could gather except kitchen slops and a small grain ration on stormy days. The sows frequently rooted down through six inches of snow and found sufficient grain to keep them in good condition throughout the entire winter.

It is stated in a recent communication from the Montana Station that several brood sows have been pastured during the past season on stubble-fields without receiving any grain in addition, and that they are in fair condition. They had, in addition to the grain stubble-fields, the range of clover, alfalfa, and timothy meadows, and the gleanings of fields where root-crops had been raised. The manure from grain-fed stock, which was spread upon the fields, also furnished some grain.

There never was a day that did not bring its own opportunity for doing good that never could have been done before and never can be again.—William Burleigh.

"How to Grow Corn"

This is a valuable book from the pen of Prof. A. D. Shamel of the Illinois Experiment Station. It is profusely illustrated from photographs, and treats scientifically the subjects of Selection, Modern Corn Breeding, and the most effective Cultural Methods under all conditions of soil. Any farmer can Double his Corn Crop without extra labor or increasing his acreage by utilizing Prof. Shamel's discoveries.

This 50 cent Book is FREE to FARMERS

While the supply lasts I will send a copy of this valuable book to any farmer who will send me the names and addresses of three or more men who are thinking of buying a riding plow this season. I will include with the book a description of the labor-saving EMERSON FOOT LIFT GANG

PLOW and other modern implements, which make easy the cultural methods recommended by Prof. Shamel. Make sure of a copy by writing

TODAY. Address me personally, K. L. EMERSON, care of

EMERSON MANUFACTURING CO., ROCKFORD, ILL.



Prof. Holden demonstrating his Seed Testing Box. (Page 17 of the book.)

BEST FOR THE WEST

Plant the seed best adapted to your soil. The Missouri Seed Co. have made a study of the kind of seed best adapted to the old and new sections of the West and Southwest, and handle no other. Be sure to get our large seed book. No better seed grown for irrigated ground. Address

MISSOURI SEED CO., 1427 St. Louis Ave., Kansas City, Mo.

SEEDS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.



IN GEORGIA & ALABAMA, as well as the most prosperous dairyman, the most thriving breeder of horses, mules, sheep, cattle and hogs, the most expert fruit-grower or trucker, is usually the Northern or Western farmer, who has located in those States in recent years and applied proper methods of culture. Thousands of others are coming this year and next.

WHY NOT YOU OR YOUR BOYS. No blizzards. No droughts. Average temperature forty-five in winter and eighty-five in summer. Rain-fall fifty inches, evenly distributed. Tax rates low. No hard winters to feed against. Open sheds. Ten months pasture.

These are but few of the many advantages.

NOW IS YOUR OPPORTUNITY to duplicate the success of these men down South, through the extension of our main line from Atlanta, Georgia, to Birmingham, Alabama, in and between which cities two million people consume farm products. The highlands are intersected with wide grassy valleys, and inter-penetrated with streams of purest water. The alluvial soil of the valleys produce the heaviest possible yields of clover, all grasses, corn, alfalfa, etc., and furnish luxuriant pasture. The highlands are ideal for peaches, apples and other fruits, and the mountain lands afford good range for sheep and goats. Lands can be purchased at from \$2.50 to \$35.00 per acre, near town, and good schools. Terms easy.

For handsomely illustrated literature and full lists of properties available throughout the South, address, mentioning this paper,

J. W. White, G.I.A., Portsmouth, Virginia, or H. B. Bigham, A.G.I.A., Atlanta, Georgia.

SEABOARD AIR LINE RAILWAY.

KIRKPATRICK'S POLAND-CHINAS Public Sale. Expenses off price. Buyer satisfied. Splendid lot of young boars ready for service. A few fancy ones for the showman. 25 breed gilts guaranteed safe in pig to Pathfinder, half-brother of Medier. No better pigs nor fashionably bred in the corn states. Have been fed and raised expressly for prolific and profitable brood stock. Write or come and see H. M. KIRKPATRICK, Walcott, Kansas.

13 WEEKS FREE
Or 15 months for only \$1
The Kansas Farmer



Cheap Rates to
California
and Mexico

The "old reliable" KANSAS FARMER, established in 1868, the best genuine agricultural weekly paper in the west. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

KANSAS FARMER COMPANY,
Topeka, Kansas.

I accept your trial offer to now subscribe to send me the Kansas Farmer three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O. Address.....

From	To	San Francisco Los Angeles	Mexico City Chimalhuacan
Chicago		\$3.3	\$3.2
St. Louis		\$3.0	\$2.7
Kansas City		\$2.5	\$2.4

Through tourist sleepers from St. Louis on Tuesday of each week. You step into the car at St. Louis and do not leave it until you reach San Francisco. Ask your nearest railroad agent for rates or address.

W. S. ST. GEORGE
General Passenger Agent
580 Wauwauight Bulldog, St. Louis, Mo.

Tickets on sale everywhere, via Missouri, Kansas & Texas, Ry.

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

Write us for description on June July and August pigs. Prices \$8 to \$10 each. Eight choice herd sows, guaranteed. Prices right if taken at once.

NEWTON BROS., Whiting, Kans.
Breeder of Registered Duroc-Jerseys.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neh.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.

E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Orchard Hill Herd of Duroc-Jerseys.
Please write for private sale catalogue of young boars and bred gilts and sows. **R. F. NORTON & SON, Clay Center, Kans.**

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kas.

Sabetha Herd of Duroc-Jerseys
Geo. Kerr, Sabetha, Kans.

Specialty of bred sows and gilts. Two of the best boars in the country at the head of herd. Write for prices or call. 'Phone at farm.

GOLDEN RULE STOCK FARM
LEON CARTER, Mer., Asherville, Kans.
Gilt-edged Duroc-Jersey Swine.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

CRIMSON HERD OF DUROCS

Our herd is headed by first Price Boar Crimson Wonder, 38755, Jr., by Crimson Wonder, 26355, the great Boar Winner of many firsts, assisted by Kerr's Champion, 34469, this fine boar is now for sale, also some fine young boar gilts for sale, also some August and September pigs. Mr. and Mrs. Henry Shrader, Wauneta, Kans.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, Wichita, Kans.

THE FAMOUS FANCY HERD,
Duroc-Jersey,
BRED SOW SALE.

At Concordia, Kansas, February 13, 1906. Write for catalogue now.

POLAND-CHINAS.

Elm Grove Stock Farm Poland-Chinas. Bred Sow Sale February 14, 1906. At Osborne, Kans. F. A. DAWLEY, Waldo, Kans.

Maple Valley Stock Farm

The grand breeder Mo. Chip 2nd is at the head of my Poland China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

DIRIGO BREEDING FARM.
Poland-Chinas for sale of the most fashionable strains. Herd boar R's Grand Chief by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale. J. R. Roberts, Deer Creek, Okla.

SNYDER BROS.
Winfield, Kans.

Breed and have for sale Percheron stallions, Polled-Durham cattle, and choicest strains of Poland-China hogs. Correspondence and inspection invited.

POLAND-CHINAS.

MAPLE VALLEY STOCK FARM

Pure-bred Poland-Chinas from leading strains. Visitors welcome and correspondence solicited. Satisfaction guaranteed. C. P. BROWN, R. 2 Whiting, Kas.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; others. Best strains represented. H. N. HOLDEMAN, R. R. No. 2, Girard, Kans.

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeder of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 33349; also a boar pig by Compromise 88203. Write us for prices and full description.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

Look out for the date of
MAINS' GREAT ROLLER TRUST

BROOD SOW SALE
James Mains, Oskaloosa, Kans.

Oak Grove Stock Farm

POLAND-CHINAS

Best strains, good individuals. Choice fall pigs, both sexes, for sale at reasonable prices.

E. E. AXLINE Oak Grove
30 miles East of Kansas City on the C. & A.
"The Only Way."
Long Distance Phone at farm, Jackson Co., Mo.

ROME PARK POLAND-CHINAS
and BERKSHIRE BOARS

A few yearling and winter, and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office).
Wellington, Kans.

Main's Herd of Poland-Chinas

A grand lot of spring and fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan

GUS AARON'S
POLAND-CHINAS
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27986, for sale. Some snaps here. Visitors welcome. Mention Kansas Farmer and write for prices.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Outward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas

Spring Creek Herd of
POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard,
Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREE
POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32604, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

200 HEAD POLAND-CHINAS

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK
1-2 Mile Sedgwick, Kansas

J. F. STAADT,
Ottawa, Kans.

Sells Choice Duroc-Jersey Hogs

Feb. 28, 1906

WRITE FOR CATALOGUE

CHESTER WHITES.



D. L. Button, Elmont, Shawnee County, Kansas
Breeder of Improved Chester-White Swine. Young stock for sale.

O. I. C. SWINE

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

SUNNY SIDE HERD O. I. C.

For sale at reasonable prices. Ten Chester White Boars, weighing from 200 to 250 pounds each and 15 head weighing from 100 to 175 lbs.; also 25 nice gilts. Address

W. H. LYNCH, Reading, Kans.

World's Fair

CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peoullar, Mo.

O. I. C. Hogs

Scotch Collie Dogs

B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandan Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,

H. D. Nutting, Prop., Emporia, Ks.

High Point Stock Farm

I have choice O. I. C. and Duroc-Jersey males. Also bred O. I. C. and Duroc-Jersey gilts for sale. B. P. Rock cockerels and eggs in season. Write or come and see

J. R. EBERT,
Route 3, Hunnewell, Kas.

PRIZE WINNING
O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Una, Silver Mine and others. Head-quarter for Boars and Gils. Write me.

O. L. KERR, Independence, Mo.

O. I. C. THE WORLD'S BEST SWINE

200 head all sizes, both sexes, singly, pairs, trios or small herds. A large number by Norway Chief 12363 grand first and sweepstakes boar Nebraska State Fair, 1904. Top quality. Rock bottom prices. Write to-day for prices to

FISHER LIVE STOCK CO.
Hastings, Nebraska

BERKSHIRES.

BERKSHIRES

From the best breeding that can be had, for sale at all times. Male and female, bred and open. Prices and breeding that will suit you.

J. P. SANDS & SON, WALTON, KANSAS

CEDAR LAWN BERKSHIRES

My sows are stried by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72688. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,
Route 1, Lawrence, Kans.

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice Boars, 100 to 150 pounds.

40 extra choice Gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kansas

BERKSHIRES

SPECIAL OFFERING—Herd boar "Premier Durham," price \$75. Farrowed Dec. 10, 1904, dam "Lady Lee 93d" by "Lord Premier," sire "Lord Durham" by Big Ben, g g son of Baron Lee 4th, dam of "Lord Durham" "Locust Blossom" out of "Patsy Girl" by "Baron Lee 4th." Dam of "Big Ben" "Matchless VII" by "Lord Winsor II" g dam "El Matchless" first at English Royal.

E. D. KING, Burlington, Kansas

KNOLLWOOD

BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 4791; Lady Lee 99th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 8 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans

BERKSHIRES.

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier straids. A. D. Willems, Inman, Kans.

BERKSHIRES

For sale, 1 extra good March gilt, bred; 2 June boars. July boars and gilts; extra fine September pigs. These hogs are sired by Berryton Duke Jr. and Kansas Longfellow, both bred by a litter brother to the \$1,000 Masterpiece 77000. Address A. D. WILLEMS, - Inman, Kansas

ABERDEEN-ANGUS.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Head headed by HALE LAD 30645. Head numbers 250 head, the largest herd bred by owner in America. Stock for sale Address PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

RED POLLS.

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE
Herd now numbers 115 head. Young bulls for sale. GEO. GROENMILLER & SON, ROUTE 1, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.
Best of breeding. Write or come and see CHAS. MORRISON & SON, Route 2, Philipsburg, Kans.

BEULAH LAND HERD
World's Fair Winning Red Polled Cattle Young Stock for sale. WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE
Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses and Plymouth Rock Chickens. Address G. C. BARTLETT, Route 5, - - - WELLINGTON, KANSAS

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

HEREFORDS.

Registered Herefords

Individual merit and choicest breeding. Date Duplicate 2d at head of herd. Correspondence solicited. A. JOHNSON, Clearwater, Kans.

Vermillion Hereford Co., VERMILION, KANSAS.
Boatman 5601

SHORTHORNS.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by L. A. MEAD, Kingsdown, Ford County, Kansas. For Sale—Bulls and females. Inspection invited.

J. L. MILLER & SON, Muscotah, Kansas. Breeders of Shorthorn Cattle. Six coming yearling bulls for sale at reasonable prices. These animals are Rose of Sharon foundation and are fine individuals and sired by The Champion of Delaney Valley 15459, a son of Gentleman 126072, he by Red Knight bred by W. A. Harris.

Plainville Shorthorn Herd

Headed by Prince Lucifer 188685. A pure Scotch bull.

Stock for sale at all times.

R. F. Shaw, Plainville, Rook Co., Kans.

ROCKY HILL HERD SHORTHORN CATTLE

J. F. True & Son, Perry, Kans.

Meadow Brook Shorthorns

Herd headed by Baron Goldsmith 224633 by The Baron 121327; females bred to him and choice young bulls for sale.

T. C. KINGSLEY, Dover, Shawnee County, Kansas. Railroad Station, Willard, Kans. Long Distance Telephone

SHORTHORN CATTLE POLAND-CHINA SWINE

Best strains of stock for sale at popular prices.

M. WALTMIKE, - - - Carbondale, Kansas

SILVER CREEK SHORTHORNS

5th annual public sale at Wichita, Kansas, February 22, 1906. The offering will be of the usual high quality and will include some Scotch bulls and females.

J. F. STODDER, Burden, - Cowley County, - Kansas

GLENWOOD HERDS

Shorthorns and Poland-Chinas

100 Scotch and Scotch Topped Females, 8 Scotch Topped Bulls in special offer, Pavonias Prince 207316 and Happy Knight by Gallant Knight 124468 in service.

C. S. NEVUS, Chiles, Miami Co., Kans. Forty miles south of Kansas City.

Valley Grove Shorthorn

FOR SALE—Young bulls, cows and heifers. Come and see them. Telephone via Dover. Telegraph station Willard. Address

T. P. BABST & SONS, Auburn, Kans.

Elder Lawn Herd

SHORTHORNS

F. K. TOMSON & SONS, Dover, Shawnee Co., Kans.

Bulls in service: GALLANT KNIGHT 124468 and DICTATOR 182524.

For Sale—Serviceable bulls and bred cows. Prices reasonable and quality good. Come and see us.

CEDAR HEIGHTS SHORTHORNS

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Ten Bulls 12 to 18 Months old also a carload of extra good 2- and 3-year-old heifers for sale. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON, Route 8, Topeka, Kansas.

MILKING SHORTHORNS

Young bulls from heavy milking dams, sired by the Scotch Topped Giltspur's Knight 171591 whose heifers are excellent milkers. Write us.

N. MANROSE, Route 5, - Ottawa, Kans.

SOLDIER CREEK HERDS OF Herefords, Shorthorns, Polled Shorthorns

Service Bulls—Herefords: Columbus 17th 91284, Columbus Budbybody 141836, Jack Hayes 2d 119761. Shorthorns: Orange Dudding 149469, Polled Shorthorn: Scotch Emperor 133646, Crowder 204815.

Herd consist of 600 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address

Joseph Peiton, Mgr., Belvidere, Kiowa Co., Ks.

Pearl Shorthorn Herd

40 Young Bulls for Sale, ranging from 6 to 24 months old and sired by the noted Scotch bulls, Baron Ury 2d 124970, Sunflower's Boy 127837, and Bold Knight 170064. Address

C. W. TAYLOR, (Wire or Phone), Pearl, Dickinson Co. (Mail Box No. 2), Enterprise, Kans.

SHORTHORNS

Herd headed by Harmony's Knight 218500, assisted by Scottish Minstrel 234970; both pure Scotch.

For sale, carload of cows and heifers and carload of bulls. Must be sold by the 1st of March. Come and see them. Prices low. Phone at farm.

A. M. ASHCRAFT, Atchison, Kans.

SHORTHORNS.

ALFALFA LEAF STOCK FARM

JOHN REGIER, Prop., Whitewater, Kans. Breeder of thick-skinned, early-maturing Shorthorn cattle.

NONPAREIL STAR 188488 at head of herd.

Rocky Hill Herds.

Shorthorns and Percherons.

In special offer a number of Scotch and Scotch-topped females bred to Sultan, a good Scotch bull. Also some good bulls ready for service. Prices reasonable.

J. F. TRUE & SON, Perry, Kans. R. R. Station Newman, 12 mi. east of Topeka.

ALYSDALE HERD SHORTHORNS

Headed by the great Cruickshank bull, Prince Consort 187008, sired by Imported Prince of Perth 158879, and out of own sister of Lavender Viscount 124755. 3 Fine Young Bulls—13 to 16 months old, for sale, at very reasonable prices. Sired by such bulls as Lord Mayor, Mayor Valentine, and Proud Knight.

C. W. MERRIAM, Columbian Building, Topeka, Kansas

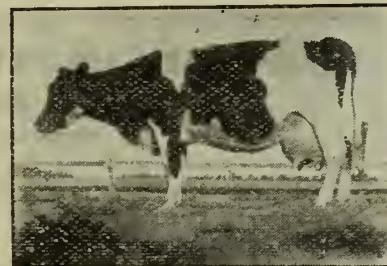
New York Valley Herds

of Shorthorns and Berkshires

Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 76236 and Star Lee 88238 at head of Berkshires. Choice early fall heifers and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER, Route 1, - - - Yates Center, Kans.

HOLSTEINS.



C. F. STONE, Peabody, Kansas, Breeder of PRIZE-WINNING HOLSTEINS.

Young Bulls and a few young cows and heifers for sale.

HORSES AND MULES.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large, black, with light points, prices right. Write me what you want. Address,

WALTER WARREN, Veterinarian, Windsor, Mo.

REGISTERED BLACK MAMMOTH and CATALONIAN JACKS, SADDLE and TROTTING HORSES

The best in the state and at a low price. Come, or write for prices on what you want.

G. A. FEWELL, LEETON, JOHNSON CO., MO.

One Pair Black Percheron Mares.

Eligible to registry, weight about 1,700 pounds, 4 and 10 years of age.

One Black Percheron Stallion

Brilliant #10160, 12 years old, and March 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kans.

?

The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$2.00
The Cosmopolitan.....	1.00
Woman's Home Companion.....	1.00
Kansas Farmer.....	1.00
Total.....	\$6.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

KANSAS FARMER CO., TOPEKA, KANSAS.

LIVE-STOCK AUCTIONEERS.

LIVE-STOCK AUCTIONEERS.

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

Bunceton, Mo.


First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer

MARSHALL, - MISSOURI

15
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER,
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling only when in employed. Ind. Phone 25. Bell Phone 22

FIFTH TERM
JONES' NATIONAL SCHOOL
of
Auctioneering and Oratory
Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President.

Some Railroad Advice

The traveling public that they are the shortest routes, others that they are the scenic route, but the

Mexican Central Is Positively The Only Route

To travel over in touring Mexico. First class through Pullman Buffet Sleeping Car runs daily between El Paso and the City of Mexico. Agencies in all the principal cities of Europe and the United States.

It is the ONLY line reaching practically EVERY important city. It covers the REPUBLIC from NORTH to SOUTH and EAST to WEST. Remember the old reliable route to MEXICO, and insist on your ticket reading that way.

For further information call on or address,

W. D. MURDOCK, Passenger Traffic Manager, City of Mexico.

A. DULCHERY, G. W. P. A., St. Louis, Mo.



Cheap Rate to California.

Californians raise gold—they don't mine much now. An easier way has been found than that! It is now obtained by farming. The alchemy of nature converts the oranges, lemons, olives, grapes, wheat, alfalfa and other products of the soil into good clothes, comfortable residences, and assuring bank accounts. It's being done every day in California. Wouldn't it pay you to inquire into this? Better yet, why not go there?

Only \$25.00

From Topeka to almost all points in California and to many places in Arizona. Liberal stop-over privileges.

On sale daily, February 15 to April 7, 1906. Tourist sleepers daily on fast trains. Harvey meals.

For particulars, apply to

T. L. KING, C. P. & T. A.,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.

Profitable Stock Feeding

.

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY,
NEBRASKA, UNIVERSITY.

How to feed for beef, mink, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humble g'd" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. "Back up," Bill, see Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

151—STALLIONS—151

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent "top stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State fair. At Iowa State fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and judge. Iams pays horses' freight and vertiser, but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1,000—SAVED AT IAMS'—\$1,000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallions at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by "slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM

Breeder and Importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS,

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS. Westphalia, Kansas.

FIFTH ANNUAL SALE

Fifty Registered Percheron Stallions and Mares, from Whitewater Falls Stock Farm, J. W. and J. C. Robison, Props., Towanda, Kansas

SALE HELD AT WICHITA, KAN., FEB. 21, '06

25 STALLIONS AND 25 MARES

Send for Catalogue to J. C. ROBISON, Towanda, Kansas

200 HEAD

OF

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

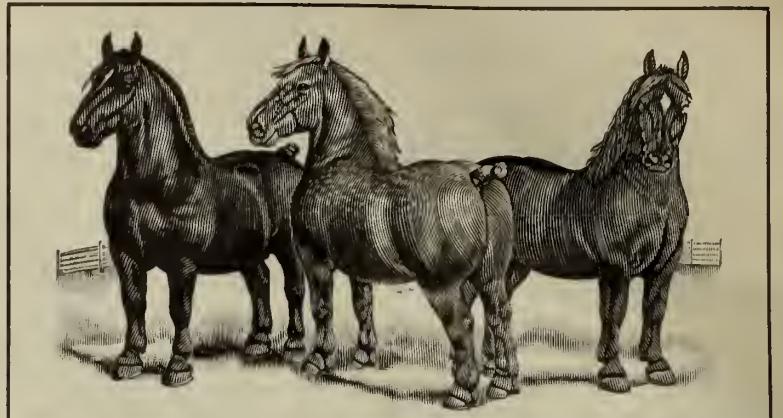
STABLES.

Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

20 YEARS IN THE IMPORTING HORSE BUSINESS 20



Have always handled the VERY BEST, THE LARGEST AND MOST PERFECT types of PERCHERONS, BELGIANS, ENGLISH SHIRES AND GERMAN COACH Stallions. Last importation, forty-two head. As for Size, UN-EXCELED.

Do not allow any IMPORTER to DECEIVE you on weights. Make him HONEST by balancing the scales YOURSELF and you do the WEIGHING. I have a pair of FAIRBANKS SCALES in front of my office. COME and SEE me and you can WEIGH every stallion in MY BARNs if you so DESIRE.

A. L. SULLIVAN, Manager,
THE LINCOLN IMPORTING HORSE CO.
Lincoln, Neb.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor, Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....

PEARSON'S MAGAZINE

NATIONAL MAGAZINE

AMERICAN BOY OR.....

PHYSICAL CULTURE MAGAZINE.....

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KAN.

J. J. Ward & Son's GREAT BREED SOW SALE

Will be held at farm near
Belleville, Kansas, February 28, 1906

13 old tried sows, and 22 fall and spring gilts, of a very large and prolific type. Among them are sows, sired by or bred to our great herd header, Skybo, winner at Illinois State Fair; Meddler, Mischief Maker, Nonpareil, Woodbury, Guy Price, E. L. 2d, Expansion, Expansion Jr., Wonder's Perfection, Keep Coming by Keep On, Sunflower Perfection, Kansas Black Perfection, and others. Send bids to Kansas Farmer.

All are invited. Send for catalogue.

J. J. Ward & Son, Belleville, Kansas

Col. John Brennan, Auctioneer.

SENSATIONAL PERCHERON EVENT Avery's Closing Out Sale

50 Percherons, including 16 Stallions
and 34 Mares.

Saturday, Feb. 24, Manhattan, Kan.

YOU WILL FIND IN THIS SALE:

A breeder
cannot sell
his best stock
and stay in the
business.
We are
Closing Out
and

Our great show and herd stallion, Bouquet 40105 (46612).
The world's undefeated pair of Percheron mares, Lena and Nina.
Champion gold metal group of five mares.
Seven successful brood mares by the great Brilliant.
12 head of weanlings sired by Illustre.
A reserve breeding herd of 20 mares.
Greatest opportunity ever offered to buy foundation stock for new herds.

A Herd Stallion
A Show Herd
Some great
Brood Mares
Some young
Stallions and
Mares.
12 head of
Weanlings
PERCHERONS
for everybody.

Cols. WOODS, HARRIMAN and BRADY

Robison's Percheron Sale at Wichita, February 21, 1906.

Catalogues ready for distribution. For catalogues and other information address

HENRY AVERY & SON
Wakefield, Kansas

Mains Great Roller Trust
Poland-China Bred Sow Sale
At farm 2 1-2 miles southeast of
Oskaloosa, Kansas, February 28, '06

70 head, including 10 young boars by Empire Chief, 4 young herd headers. Some extra young sows by Empire Chief open. Over half of my selected reserved herd will go in this sale. Half of the sows are by Empire Chief. Two-thirds of the offering will be bred to Roller Trust 37010 by High Roller 27009, the champion of Ohio State Fair and sire of 19 World's Fair winners bred by S. E. Schellenberger, Camden, Ohio.

If you want something with size and finish you will find it at this sale. Sale under cover.

Cols. Lafe Burger, Wellington; McFadden, Whiting; John D. Snyder, Winfield; and J. M. Pollom, North Topeka, auctioneers. Oscar Simmons, Nortonville, Clerk. Write for catalogue.

JAMES MAINS, Oskaloosa, Kansas

DISPERSION SALE —OF HORSES—

AT SOUTH OMAHA ON
MONDAY, FEB. 26, '06

The Maple Grove Stud of Percheron
and French Coach Horses

50 — HEAD — 50

25 Stallions 25		25 Mares 25
--	---	--

All coming 3 and 4 years old. These are the colts and fillies that were under 2 years old at my last sale in 1904. They are mostly all black, strong-boned, stylish colts, one of the choicest lot of Percherons ever offered to the public at auction in this country.

MARK M. COAD,
Fremont, Nebraska.

Catalogues may be had of John S. Cooper, South Omaha, or Mark M. Coad, Fremont, Nebraska.

Snyder & Cooper Consignment
extraordinary to the
Wichita Breeders' Sale of Poland-Chinas
February 24, 1906

Five bred to Simply O. K., the boar good enough to defeat the Missouri and Illinois State Fair sweepstakes hogs of 1901 in the first show of the season and should logically be classed as the greatest of all the show hogs of 1907 (the catalogue gives details). These are by Keep On, Chief Perfection 2d, Mischief Maker, Proud Perfection and Perfect Tecumseh. Four gilts by Arsenal (the great show breeding boar, half brother to the sire of the World's champion sow and much the same kind of a breeder) bred to Meddler Correct. Four are by Arsenal and one by Ideal Perfection bred to the Premier breeder, Mellow Sunshine, one of the best hogs of an \$850 litter sold at 5 months old and out of a \$750 dam and by a \$5,000 sire. One boar by Meddler out of Chief Perfection 2d, dam; one by Luster Sunshine out of Mischief Maker dam, and others.

Write for catalogue to SNYDER AND COOPER, Winfield, Kans.
Send bids to Col. Jas. W. Sparks, Wichita, Kans.

ALFALFA SEED Kansas Grown. Non-Irrigated.
From grower to consumer. Write for prices.
F. D. MORRISON, MEADE, KANSAS

Wheat Farms on Easy Terms

We offer to BONA-FIDE SETTLERS their choice of one-hundred
160 acre farms in

Sherman County, Kansas

At from \$5 to \$15 per acre. ONE FOURTH CASH, the balance payable in nine equal annual payments. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King, = = = McPherson, Kansas

STRAWN'S SHORTHORN SALE

AT VALLEY FALLS, KANSAS, MARCH 1, 1906

25 Head--6 Bulls, 19 Cows and Heifers

My sale to be held March 1 at my stock farm five miles north and two miles west of Valley Falls, and one mile north of Half Mound, offers a splendid opportunity to those who wish to add to or establish a herd. We have been breeding Shorthorns for many years, and our offering includes many breeding cows, with which until now, we have refused to part. Some of my calves are grandsons and granddaughters of Gentlemen 126073, the famous Kansas Agricultural College bull, who was formerly at the head of my herd. I also offer my grand herd bull, Prime Albert 213593. These cattle are not fat but are in true breeding form, and in such shape as can not fail to do good for the buyer. At this sale I will also sell a work team and a team of driving horses; also some 2- and 3-year-old mules. Also 18 grade cattle. For further information and catalogue, address

L. R. STRAWN, Half Mound, Kansas

FIFTH ANNUAL COMBINATION SALE

WICHITA, KANSAS, FEBRUARY 21-24, 1906

FEBRUARY 21, 1906

50 Percherons

from J. W. and J. C. Robison's great Whitewater Falls prize-winning herd. 25 stallions, including the great stallion Iena; nearly all Royal and Kansas State Fair winners. 25 mares, mostly blacks

and many of them sired by or bred to the World's Fair Winner Casino. A young, useful lot the equal of which has not been offered heretofore.

FEBRUARY 22, 1906

50 Shorthorns

drafted from the great herd of S. C. Hanna of Howard, Kansas, and J. F. Stodder and Marshall Brothers at Burden, Kans. These herds need no introduction to Kansas people, and when it is known

that the animals for this sale were selected and have been reserved for months, the merit of the offering is assured. Bulls bred and reared for use in the best herds and cows and heifers bred to pure Scotch bulls.

FEBRUARY 23, 1906

50 Herefords

Selected by Robt. H. Hazlett from his Hazelford Place at El Dorado, Kansas, strong in the blood of Painter and all the greatest Hereford bulls.

A. Johnson's great herd at Clearwater, Steele Brothers' World's Fair winning herd at Richland, Kans., J. P. Sands & Sons, Walton, Kans., herd. [These gentlemen topped the bull offering last year.] D. Fox & Sons, Atlanta, Kans., whose herd was the leading herd at the Northern Oklahoma Fair in 1905.

AUCTIONEERS: R. L. Harriman, Jas. W. Sparks, L. R. Brady, Wm. Arnold.

J. C. ROBISON, Manager, Towanda, Kans.

February 24, 1906, Breeders' sale of Poland-China bred sows, same place.
H. E. LUNT, Manager, Burden, Kans.



KANSAS FARMER



TOPEKA, KANSAS, FEBRUARY 22, 1906

Established 1863. \$1 a Year

Volume XLIV. Number 8

IS THERE A "YELLOW PERIL" FOR THE UNITED STATES?

War in the far East is again strongly suggested by the news from that quarter of the world. The six thousand Americans engaged in Missionary work in China have been reported to be in imminent danger of massacre. Later advices have somewhat relieved the anxiety as to the Americans.

That the adjustment of the differences in the far East effected as a result of the war between Russia and Japan would be permanent has scarcely been expected by thoughtful people. That China would remain dormant after witnessing the inspiring achievements of the valiant Japanese and with the menace of Russia on her long northern boundary was not to be anticipated. It is, therefore, not surprising that Russia has discontinued the homeward movement of her Eastern army pending developments in China.

Persons who have been alarmed about the imminence of the "yellow peril" have hastily suggested that America is about to be involved in a war with China and that the Chinese army will be organized, drilled and commanded by efficient Japanese officers so that they will be formidable adversaries; and that, since China is capable of furnishing practically unlimited numbers of common soldiers while Japan is equally well supplied with the best officers in the world, a prospect of war with this combination is indeed a serious matter.

Let us examine for a moment the probabilities in the case.

For a "yellow" army Japan must, for the present at least, furnish the brains. Japan has a close treaty alliance with England. England is the traditional enemy of Russia as well as the treaty friend of Japan. English influence is therefore very great in Japanese counsels. On the other hand, England's relations with Germany and with France are easily strained, while her dependence for friendship among white peoples is steadfastly with the United States. Japan also has maintained a steadfast friendliness for this country, a friendliness which was strengthened by the uniformity with which American sympathy was with the Japanese during their war with Russia. So, too, China has many reasons for friendliness towards the United States. It was on the initiative of this country that the integrity of China was preserved at the time of the "boxer" uprising.

The danger to China is from Russia. Whether the Chinese are able or unable to comprehend the situation there is no doubt about their alert mentors, the Japs. Dissatisfied with the terms of peace at the conclusion of their great war with Russia, they are shrewd enough to avoid antagonism with other nations and to direct the attention of their protege, the "Celestial Empire," to the menace of Russia.

There appears to be little reason for the Western World to apprehend a "yellow peril" as long as Russia remains the target of the yellow men's antipathy.

A meeting of business men of the Southwest is called to be held at St. Louis April 16 and 17, for the purpose

of discussing plans for the development of this section of the country and making the most effective use of its resources.

SHALL WE SACRIFICE EUROPEAN MARKETS FOR FARM PRODUCTS.

Excessive supplies of cattle in leading markets during the past year have taxed the capacity of stock yards, the

Britain or America if a key to unlock the doors could in any way be found. The common people there are practically without beef at all times! Horsemeat is in frequent evidence. They would feast upon grades and cuts of beef which we are too fastidious to buy. Where we demand a steak or a roast they would be delighted with corned beef or a boiling cut. And as for hams, bacon, sausage, lard, etc., the

beef, pork, etc., have proved unavailing.

The delegates to the National Reciprocity Conference held in Chicago last August representing such bodies as the National Live-Stock Association, the American Stock-Growers' Association, the leading live-stock exchanges, the Chicago and other boards of trade, important mercantile and manufacturing associations, the Shorthorn, Hereford, Aberdeen-Angus and other cattle-growers' associations—in brief, over 200 representative agricultural and commercial organizations, resolved that in their judgment the main trouble was the failure of our Government to carry out the broad statesmanship of Wm. McKinley in the matter of providing vents or outlets for our surplus; and in accordance with the instructions of that important gathering the American Reciprocal Tariff League has been formed for the purpose of presenting that view of the case to Congress and the country; in the hope that through discussion and study of the problem a solution profitable alike to both Europe and America may be reached.

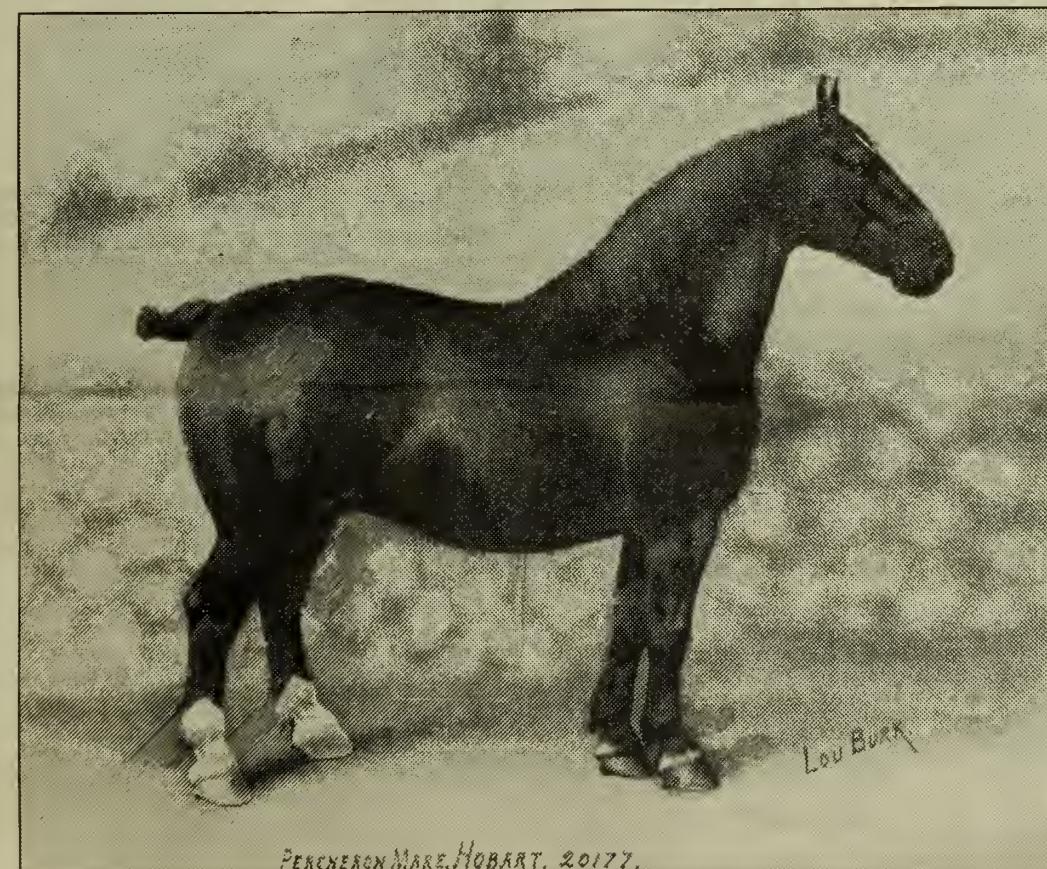
Two interests prevent at this time the accomplishment of this object, the one German the other American; but forces are now in motion on both sides the water that may in time lead to better reciprocal arrangements. The Agrarian landlords in Germany want American farm products kept out. Why? Simply because they are thereby enabled to secure excessive prices for what few sheep, swine, cattle, and grain their soil grudgingly produces. The American "stand-patter" objects to our making any tariff concessions to Germany. Why? Simply because certain highly protected interests here now claim as a vested right a measure of protection which many of them no longer need.

Needless to say, both parties could concede enough to bring about better and friendlier relations, if they would; but will the people of Germany and America insist upon their doing it? That is the whole question in a nutshell. The refusal, thus far of both parties to the controversy, to yield even an inch is driving the two great nations headlong into a commercial war, the results of which none can foresee.

McKinley's dictum that "Commercial wars are unprofitable" commends itself to all conservative business men. Wm. McKinley was an ardent advocate of reciprocity treaties; but as is generally known all his efforts to secure ratification of these were thwarted in the Senate. Twelve separate treaties negotiated under his direction failed of ratification and Section 4 of the Dingley Bill under which he acted has now expired by limitation. Some have proposed a revival of this reciprocity section of the existing law at this session of Congress, but it is said that the Senate is still hostile to the treaty idea. What then can be done?

Write to your member of Congress, write to both Senators from your State and get your neighbors to do the same. Ask them to take this question up and study it. Suggest that this business should be settled upon a basis of mutual concession; not with clubs.

If a maximum and minimum law is to be passed based upon existing sched-



PERCHERON MARE, HOBART, 20177.

A FOUR-TIME WINNER AT KANSAS FAIRS.

The property of F. H. Schrepel, Ellinwood, Kans.

Ingenuity of salesmen, the resources of distributors and the purses of producers. Particularly is this true of the lower and medium grades constituting the great bulk of the supply. The question of markets is one, therefore, having peculiar interest to all parties concerned at the present time. Slaughterers have apparently made every effort to stimulate the home market: the average price received for dressed beef at wholesale during 1905 at Chicago being only about 6½ cents per pound. The shipping and export (English) demand helps to make a clearance of the better grades, but the question of what to do with the flood of grass and short-fed cattle from farm and range becomes more perplexing year by year.

The English market gives us an enormous outlet for the better grades of live-stock; our annual sales of feedlot products to London, Liverpool and other British cities aggregating nearly \$150,000,000. But for this our Western feeders would indeed be in hard lines, because the surplus of this industry is so stupendous that the home market alone is powerless to absorb it at a price that would admit of the feeding of high-priced corn upon high-priced land, at any profit. Even here, however, we will have to look closely to our laurels, as Argentina is becoming a more dangerous competitor in Great Britain each recurring season.

Continental Europe would afford a vast outlet for the very class of meats most difficult to find a market for in

product of literally millions of corn-fed hogs could be marketed in France, Germany and contiguous countries if a way could be found through the custom house.

None except those who have studied the situation abroad have any adequate conception of what daily commissions in our leading markets from Paris, Hamburg, Bremen, Berlin, Vienna and other great Continental centers of population would mean to the farmers and feeders of agricultural America. And, on the other hand, only those who know personally the comparative scarcity of good bread and meat on the Continent can appreciate fully what a blessing such an American "invasion" would be to the masses of people.

Is there not some way whereby the European consumer and the American producer can be brought in touch? Possibly not; but as our exclusion is a matter of hostile tariffs, the least we can do is to study the question carefully and see if some way can not be figured out of bringing the groaning granaries and glutted cattle-pens of the West within reach of the poorly-fed millions of the old world. It is understood that Germany is in a mood to treat with us with a view towards averting a commercial war, and it is only a few years since France approved of a treaty which would have allowed us to sell her some \$25,000,000 of agricultural products annually; but thus far all efforts to secure these European outlets for our corn, wheat, oats, hogs, cattle, dressed

beef, pork, etc., have proved unavailing.

ules, the present duties should be the maximum and a level at least 20 per cent below established as a minimum.

Any further increase in rates is absurd and will only make matters worse.

VARIETIES OF FRUITS.

Editor Kansas Farmer: Can I get a horticultural report that gives a list of apples, cherries and peaches best suited for this part of Kansas? Also we want a treatise on grape culture. We particularly want a list of hardy peaches.

Morris County. J. F. BACON.

Prof. Albert Dickens, horticulturist of the State Agricultural College, furnishes a list as follows:

Apples:—Early Harvest, Benoni, Cooper, Maiden's Blush, Jewell, Grimes, Jonathan, Winesap, Missouri Pippin, W. W. Permain, Huntsman, York Imperial.

Plums:—Burbank, Wildgoose, Weaver, Abundance, Pottawatomie, Wolf, Wayland, Lombard, Robison, Quaker, Damson.

Currants:—Black—Crandall, Jelly Red—Red Dutch, Versailles.

Peaches:—Triumph, Champion, Mt. Rose, Mamie Ross, Alberta, Crasly, Family Favorite, Salway, Hiley, Belle of Georgia, Bonanza.

Strawberries:—Aroma, Clyde, Crescent, Excelsior, Gandy, Parker Earl, Senator Dunlap, Warfield, Bubach, Haverland.

Blackberries:—Early Harvest, Snyder, Taylor, Merserean.

Apricots:—Moorpart, Early Golden.

Pears:—Kieffer, Lincoln, Duchess, Bartlett.

Grapes:—Green Mountain, Moore's Early, Worden, Concord, Woodruff Red, Wyoming Red, Lutie, Catawba, Brighton, Brilliant, Diamond, Elvira, Agawam.

Gooseberries:—Houghton, Downing.

Cherries:—Sweet—Gov. Wood, Doubtful. Sour—Early Richmond, Montmorency, Dyehouse, Wragg, English Morello.

Red Raspberries:—Louden, Thwack.

Black Raspberries:—Kansas, Cumberland, Queen of the West.

Some of the old favorites of the commercial orchardist, such as the Ben Davis, will be missed from Professor Dickens' list. A judicious selection would consist of very many more of some varieties than of others. Thus, in apples one would need but few of each variety named in the list until Maiden's Blush is reached. Even here it should be remembered that this is a summer apple. Grimes is an excellent fall and early winter apple. Its quality is unsurpassed. It keeps fairly well in cold storage, but in the absence of cold storage must be used by midwinter. Jonathan is unsurpassed for quality, has a splendid red color, is just the right size for eating out of hand, and keeps perfectly in cold storage. Without cold storage it is a fall and early winter apple. Winesap, Missouri Pippin, and York Imperial do well in Kansas, are good keepers, and generally profitable.

In making selection much will depend upon whether or not cold storage is available. With cold storage plant many Jonathans. Without it let Ben Davis take the place of a considerable portion of the Jonathans.

If our correspondent will write to the Kansas Farmer a statement of the extent of his proposed plantings and whether he will use cold storage we will endeavor to obtain more explicit suggestions as to desirable proportions of the several varieties.

STUDENTS' AGRICULTURAL ASSOCIATION.

The Agricultural Association of the students of the Kansas Agricultural College numbers about 350 members, and is composed of energetic young men who are endeavoring to build up the best agricultural interests of the State. They meet regularly once a week and discuss all the leading topics pertaining to agriculture. They are publishing a paper called "The Agricultural Review," which is ably written and has a large circulation throughout the State. It is hoped that its influence will be felt and that it will lead to the rapid advancement of dairy and agricultural interests.

The following is a report of the last meeting, held February 10:

"At 2.30 we were promptly called to order by our vice-president, Mr. Hull, in the absence of President Snodgrass. After roll call and invocation by Mr. Greenough, the minutes of the previous meeting were read and approved. We were then glad to welcome into membership Messrs. Morris and Shipley, the latter gentleman being initiated. We then had the pleasure of listening to a very interesting talk on 'The Most Profitable Education for the Young Man,' by our elder member, J. J. McCrea. 'The Advantages of Kansas as a Dairy State' was interestingly discussed by J. M. Cook. Professor Melick then

gave a practical and instructive talk on 'The Dairy Cow and Her Origin, and Some of the Practical Problems of the Kansas Dairymen.' E. W. Cudney rendered a short but interesting declamation, followed by a reading by our 'chore boy,' Ralph Cooley.

"After being criticised for our misdeeds and complimented on our good points, we went into a lively business session, and then adjourned."

RURAL ROUTES ON ESTABLISHED ROADS ONLY.

EDITOR KANSAS FARMER:—Will you please answer the following question through the "Old Reliable?"

Do all roads have to be laid out by petition before a rural route can be established over such roads? Please answer as soon as possible as we are anxious. J. A. B.

Ford County.

The Postoffice Department establishes rural free delivery routes on roads legally laid out, located and opened and on no others.

The laws under which roads are legally laid out, located and opened in Kansas are contained in chapter 154 of the General Statutes. These laws provide for a petition by not less than twelve householders of the county residing in the vicinity where the road is desired. This petition is to be accompanied by a bond of one or more persons guaranteeing to the county the expenses of proceedings in case the road shall not be finally established. The petition and bond are presented to the Board of County Commissioners, who give twenty days' notice and appoint viewers. The county surveyor, on request, meets with the viewers. Provision is made for condemnation proceedings and payment of damages where necessary to secure the land over which the road is to be established.

It will be well for those interested to read carefully chapter 154 of the Kansas Statutes. Each justice of the peace is furnished a copy of these statutes at the expense of the State.

TO DESTROY RATS.

EDITOR KANSAS FARMER:—Our barn is literally full of rats. Can you tell me some way to rid the place of them before the pests increase again; also before time for little chickens? R. O.

Stafford County.

A few good cats kept at the barn and given a little milk each morning and evening will be found the most efficient remedy for rats. The prairie-dog poison furnished by the Agricultural College is also good.

The Secretary of the Interior has signed the papers authorizing the commencement of work on the irrigation enterprise near Garden City, Kans. This means the expenditure of something more than a quarter of a million dollars in this kind of development. The underflow water will be pumped into the irrigation ditches.

THE IMPLEMENT BLUE BOOK.
The Midland Publishing Co., of St. Louis, Mo., has just issued the third annual edition of the Implement Blue Book, a complete and accurately compiled directory of agricultural implements and machines, showing in detail the goods of every manufacturer in the United States and Canada, supplemented by a full list of jobbing and branch houses at all the principal distributing points. The Blue Book for 1906 contains 448 pages, 6 by 9 inches, handsomely bound in blue cloth, blue embossed, and was published for the exclusive use and benefit of dealers in agricultural implements with whom it is the standard of the world. The company has on hand a few hundred copies which it is sending out upon receipt of 20 cents to pay for packing and postage.

Defeats the Rats.

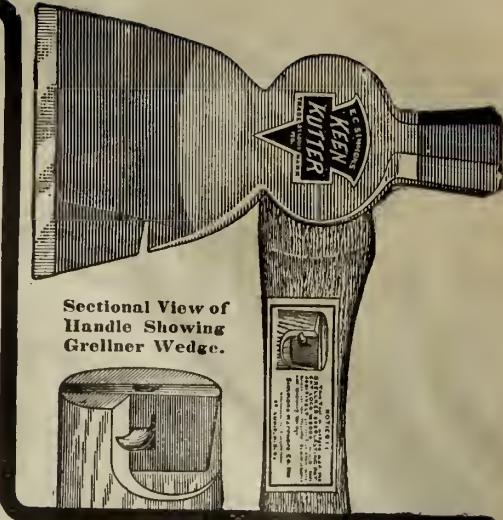
EDITOR KANSAS FARMER:—In your issue of February 8, F. H., of Osborn County, makes inquiry about cement foundations, and I observe your comment in regard to the rat problem. I wish to give your readers my plan for barn foundation.

I have the past year built a barn 37 by 41 feet, rat-proof, which holds about 30 tons of hay overhead. I used 6 by 6 posts and wherever I wanted a post I dug a hole about 2½ feet square and 14 to 16 inches deep. In order to save concrete I used flat rock in the bottom of the holes and leveled up with concrete; then used any kind of rough rock, filling in with concrete until I had the desired height, leveling all up per-

Long Lived Tools

Keen Kutter quality tells in the long life of Keen Kutter Tools as well as in better work and greater satisfaction. It is not an unusual thing for Keen Kutter Tools to be passed down from father to son, so long do they last.

The long life of Keen Kutter Tools compared with the short term of service of inferior brands makes Keen Kutter Tools by far the least expensive tools that you can buy. The



Sectional View of Handle Showing Grellner Wedge.

KEEN KUTTER

trademark covers every kind of tools so that you may always be sure of highest quality by insisting upon Keen Kutter Tools.

An example of the Keen Kutter excellence is found in Keen Kutter Hatchets and Handled Axes. These are made of the highest grade of steel, on the most approved lines, and by the best workmen. Every Keen Kutter Hatchet and Axe has the handle wedged with the Grellner Patent Everlasting Wedge which positively prevents the head ever flying off or working loose, and is sharpened ready for use. These are exclusive Keen Kutter features.

Some of the other kinds of Keen Kutter Tools are: Axes, Adzes, Draw Knives, Saws, Tool Cabinets, Scythes, Hay Knives, Grass Hooks, Brush Hooks, Corn Knives, Eye Hoes, Trowels, Pruning Shears, Tinner's Snips, Scissors, Shears, Hair Clippers, Horse Shears, Razors, etc., and Knives of all kinds.

If your dealer does not keep Keen Kutter Send for Tools, write us and learn where to get them. Tool Booklet
Every Keen Kutter Tool is sold under this Mark and Motto:
"The Recollection of Quality Remains Long After the Price is Forgotten."
Trade Mark Registered.

SIMMONS HARDWARE COMPANY,
St. Louis, U. S. A.

298 Broadway, New York.

flectly. Then I made 3 pyramidal molds, 20 inches square at the bottom, tapering to 6 inches at the top (inside measure), set the molds in line on center of pillars, then poured in a layer of cement. I used a layer of small rock (to save concrete), filling alternately with small rock and concrete until within about 4 inches of the top of mold. Then I placed a round stick, about 1½ inches in diameter, in the top of the mold and packed concrete around it until the mold was full. When it became set (not too solid), I would shake the stick a little and lift it out. When the concrete became firmly set I would lift the mold off and proceed as before until all was complete.

For the outside wall I took six-inch fencing boards and cut them, beveling to fit in between these pyramidal-shaped pillars, and set them 4 inches apart, and level with the top, first having filled in between the pillars with dirt well pounded down, then placed small, flat rocks under these boards (carefully fitted in so as to leave no holes), extending out 4 or 5 inches on either side. A layer of cement could be used if flat rock could not be had. I then filled the molds formed with these fence boards the same as the pillars. The object of this projection is to keep the rats from under the foundation. When a rat starts to dig under the foundation, he commences up against the foundation and goes down under, but in this case he will not dig straight out and then down but will turn and go along the wall. He may go clear around the barn but can not get under the foundation if care has been used. If he happens to get inside through some door, he will not get under the foundation.

I used no sills in my barn, but bored holes in the end of the 6 by 6 posts, taking old cultivator arches and cutting dowel-pins 10 inches long and driving them in the ends of the posts, leaving 4 inches out, and set the ends of posts on the pillars with dowel-pins in holes of pillar. I have no cross-walls—just pillars wherever I have a post. The door-posts are fixed the same way, only using smaller posts and smaller pins. My barn is raised 10 to 18 inches above the ground, filled inside and graded outside to top of pillars. I have no sills to hold water on the foundation and rot, as many barns that I have seen have. M. W. EBY.

Franklin County.

The fight of oleomargarine for a place and a name is not yet ended, as witness the following from a writer in the Delineator: "Oleomargarine has been misrepresented to the public to a greater extent probably, than any other article of food. From the time

of its first appearance in the market as a competitor of butter, there has been a constant attempt to create and foster a prejudice against it as an unwholesome article made from unclean refuse of various kinds, a vehicle for disease germs, and a disseminator of tape-worms and other unwelcome parasites. It has been said to have been made from soap grease, from the carcasses of animals dead of disease and from a variety of other articles equally unadapted to its manufacture. The publication of a great mass of untruth can not fail to have at least its desired effect, not solely on the minds of the ignorant but even on those of persons of more than average intelligence. So a prejudice was created against this valuable food product, but it is becoming gradually less pronounced."

Table of Contents

Alfalfa and other soilings crops.....	198
Alfalfa bacteria.....	179
Alfalfa in Western Kansas.....	179
Alfalfa, yellow.....	180
Animal dentistry.....	182
Artichokes.....	179
Aunt Kate to Katharine.....	189
Beef meal, Armour's.....	182
Brood mares, value for.....	181
Celery.....	186
Corn-stalk ground for alfalfa.....	180
Cow-pea question.....	179
Cow-peas.....	180
Educated motherhood.....	188
European markets for farm products, shall we sacrifice.....	179
Farewell to the town (poem).....	188
Farm experience in Southeast Kansas.....	179
Farm notes.....	181
Flax with grass-seed.....	186
Fox squirrels.....	186
Fruits, varieties of.....	178
Golden rule for clubs.....	190
Grange to the farmer? what benefit is the.....	186
Hamilton, Gall.....	190
Honey locust.....	186
Insurance (Grange).....	191
Kherson oats.....	180
Mangel wurtzels, comparative feeding value of.....	183
Oats, rust proof.....	179
Place for you, a (poem).....	189
Poland-China Association, Standard.....	179
Poultry and eggs, a few figures on.....	196
Poultry notes.....	197
Poultry show notes.....	178
Rats, defeats the.....	178
Rats, to destroy.....	178
Recipes, tested.....	188
Red cedar.....	186
Rural routes on established roads only.....	178
Seed-corn.....	180
Smut in wheat.....	179
Spelt.....	179
Students' Agricultural Association.....	178
Things that 'sprise you (poem).....	190
Trees in Western Kansas.....	194
Washburn College.....	189
Washington, George.....	189
Washington, little George.....	190
Yellow peril for the U. S.? is there a.....	177

Agriculture

Farm Experience in Southeast Kansas.

Editor Kansas Farmer:—As I promised a year ago that I would write again of my farm experience, I will do so now. First I had tried to get a stand of Bromus Inermis, having spent about \$50 for seed at three different times. I got seed from a grower in South Dakota. When I wrote two years ago I thought I had a tolerably fair stand, but had sown some redtop seed on the ground in February. Quite a lot of the Bromus Inermis headed out, and I moved it, as there were many weeds in it, and thrashed it. I sowed the seed on the same patch—about 14 acres of rather thin land. Last year I expected to have a fair stand as it is claimed to thicken up as it becomes older; but to my surprise, last summer there was scarcely a spear of it, while there was a good stand of redtop. What killed it? I do not know. I had no trouble to start the seed, but it appears to die out when an inch or two high; but the last time I thought sure I had it started. It does not seem to be adapted to Southeastern Kansas. I believe redtop much better for this country on up or low land, as you can sow it on old worn-out pasture without breaking the sod. I had fairly good success with English blue-grass, timothy and clover.

Last spring, March 13, I sowed fourteen acres of oats. I drilled them in fall-plowed land. About the end of April we had a dry spell. The oats looked bad. I took a four-section harrow, weighted it down and harrowed crosswise. Then took an iron roller with light harrow hitched to it and went over it again, covering it almost completely. My neighbors said "You have ruined your oats; you have harrowed them all out of the ground." I told them to wait and see. In a week they had recovered and made a fine growth. They made a little over 40 bushels to the acre. Most of my neighbors' oats only made 20 bushels—some 30, and mine weighed 35 pounds to the bushel.

As soon as I could get the oats out of the field I plowed the stubble, and on July 3 I planted a part of the field in cow-peas, and the balance on July 15. They made a fine growth. I drilled them in about three or four inches deep with a corn-planter, using medium sized plates, and double-rowed them. They nearly covered the ground. That way a bushel will plant nearly four acres. I planted them for the benefit of the soil, not expecting them to get ripe, but they grew about 18 inches high, got well ripe before frost, and were white with pods. I was puzzled to know how to cut them to save them. I hit on the idea of using a self-rake, and found it worked all right, only I did not have the ground quite smooth enough, the big platform sometimes dragging on the ground. The self-rake is just the thing to cut them with when planted this way, but the ground should be rolled and harrowed crossways after planting, and the dead furrows plowed shut, so as to leave the ground as smooth as possible. This must be done soon after planting, as they will be up in three or four days. They require but little moisture.

After they were cut I bunched them the same as flax. I intended to thresh them out of the field, but we had a month of wet weather with rain every few days. When they were dry I could not get on the ground with a team. I turned them two or three times so they would not rot, and was surprised to find that though the rain went through them they were in good shape. In November I tried to thresh, with separator, but this broke them all up, so we stacked them. There were about 18 good loads on the 13-acre patch. I intend to tramp them out with horses, when the weather and ground permit.

I then turned nine calves on the patch—lost three by bloat. I think they did not go to water as they should. One stormy evening when I put them in the barn I saw one was badly bloated. I took a little turpentine and applied at naval, making it wet six inches around. To my surprise the calf was well in the morning. Three weeks ago I turned the milch cows on the field and in two days time their milk increased to double the amount. It looked as though they were grazing on grass—picking up every pod and some stubble. I think they would have made ten to fifteen bushels of peas per acre. I am sure they will raise the fertility of

the soil to produce ten to twenty bushels more per acre. I believe they will make more peas if planted late, as they will ripen evenly if planted that way. If planted early, they run more to vines and blossom and ripen along until frost. Mine were the Whippoorwill variety. Four inches from the ground they spread out, and if the ground is smooth they can be cut that low. If the rows are straight, it will help much in cutting them. It will pay to raise them whether you cut, pasture, or plow them under. You can not raise a better crop for milch cows; there is nothing better to fatten sheep—all stock is fond of them, and they are worth millions in raising the fertility of the soil.

Kansas seed-houses want \$2 per bushel for the seed; but in Southwest Missouri you can get them for less. For the benefit of the Kansas Farmer readers I have asked them to advertise in your paper. We have so much wornout land, that needs to be built up, and cow-peas will do it cheaper than anything else, and without losing any other crop.

J. RUFL.

Neosho County.

Alfalfa Bacteria—Rust Proof Oats.

Please let me know if you have had any experience with alfalfa bacteria and what results. Is there such a thing as rust-proof oats?

EDWARD JONES & Co.

Marion County.

We have made no direct experiments in inoculating alfalfa with the bacteria which grow on the roots of that plant. These bacteria appear to be always present in the soils of the station farm and we do not have to supply them. I enclose article on nitro-culture which may give you some information.

There is no such thing as rust-proof oats, so far as I know. Some varieties of oats do not seem to be so badly affected by rust as others, but I observe that the tendency to rust varies with different varieties in different seasons. A variety of oats which does not produce too rank a growth of straw and which matures early is usually less affected by rust than the ranker growing, later maturing varieties. The Sixty-Day oats and Kherson oats being of the early-maturing class have appeared to be less affected by rust in the experiments at this station than other varieties. Perhaps the Texas Red is also more or less exempt from rust in an average season.

A. M. TENEYCK.

Alfalfa in Western Kansas.

I want to sow alfalfa this spring. Will it do out in this country? The soil is black and a little sandy but not enough to speak of. How must I prepare my ground? I thought I would plow it now and harrow occasionally until spring.

FRANK WINTER.

Pawnee County.

I have requested Prof. J. T. Willard, acting director of this station, to mail you a copy of bulletin 114 giving information regarding seeding and culture of alfalfa.

You ought to be able to grow alfalfa successfully in Pawnee County. It would have been well if you had plowed your land early last fall if you intend to plow it and your plan of frequent cultivation previous to seeding is a good one. It is necessary to put the ground into a fine seed-bed condition in order to insure a catch of alfalfa. Perhaps you have a piece of corn-stubble land or land which grew cultivated crops last year, which has not been plowed. If you have such land—not too weedy—a good seed-bed for alfalfa may be prepared by disk and harrowing. Sow quite early in the spring, as soon as the ground is in fit condition to sprout the seed.

A. M. TENEYCK.

Cow-Pea Questions.

I would like to sow cow-peas this spring. How early should I sow, and how am I to tell when the seed is ripe? Can I take that seed and sow it in the fall as a fertilizer? Would it be best to plow the peas under or let them stand till spring?

WILLIE WIEMERSLAGE.

Lincoln County.

Cow-peas should be sown about the middle of June in a well-prepared seed-bed. It is well to plow ground quite early in the spring and cultivate it several times before planting in order to destroy the weeds and prepare a firm, well-settled seed-bed. If you wish to grow cow-peas for seed, it is best to plant in rows $2\frac{1}{2}$ to $3\frac{1}{2}$ feet apart and cultivate much the same as you would corn. When sown broadcast or in close drills, cow-peas grow more upright and make excellent forage but produce comparatively few pods and peas. Grown in this way the crop may be cut

with the mower and saved for hay; but when grown in rows for seed it is usual to harvest with the bean harvester or pull the peas, since the vines lie so close to the ground that they are not readily lifted and cut with the mower.

Cow-peas ripen very unevenly; you will find ripe pods, green pods and blossoms on the vine at the same date. The peas are not easily shattered and the best plan is to wait until most of the pods are ripe when the crop may be harvested and placed in bunches or left in windrows to cure in the field. This usually requires several weeks, when the peas may be thrashed. The usual method is to use the ordinary grain-separator, but this method of thrashing splits the peas badly, and if your plan is to produce peas for seed rather than for feeding, those which you expect to save for seed had better be thrashed by hand, unless you have a bean thrasher. This is not nearly as difficult an undertaking as many farmers seem to think. A good crop of cow-peas will yield 15 to 20 bushels of seed to the acre and a man may readily fall out an acre or two of peas in a day.

You could not use the seed produced next season for fall planting; usually the peas would not be thrashed before the middle of October. It is necessary, therefore, to save seed from the previous year's crop for late summer or fall planting.

When used as a fertilizer, the peas may be either plowed under as green manure, taken off for forage, pastured off with cattle and other stock, or when used as a catch-crop on wheat-stubble or in corn, the peas may be left as a cover-crop during the winter, furnishing also some fall pasture. The greatest benefit may often be secured by plowing the peas under green, provided a suitable crop is planted the next season. Corn follows cow-peas, used as green manure, very well, but it is not advisable to plow under a crop of cow-peas and seed to wheat the same fall, or even to sow small grain the next season because of the loose, open condition of the seed-bed. I have mailed to you a circular letter which gives further information regarding the growing of cow-peas and their use as a fertilizer.

A. M. TENEYCK.

Artichokes—Spelt.

In last week's Kansas Farmer I notice you have seed-corn and other kinds of seeds to sell. Will you kindly mail catalogue and price list of your seeds?

Have you had any experience in growing artichokes for hogs and other stock? If so, what do you think of them? I notice two kinds advertised in the seed books, Large Mammoth White and Jerusalem. Which is the better variety?

Have you had any experience in growing spelt or emmer? Is there much of this grown in Kansas? Does it do well here? So far as you know what is a fair average yield per acre on good land, when the season is reasonably favorable? Is it a good, strong, healthful feed for milch cows, horses, hogs, etc? Have you any good spelt for seed to sell?

I am anxious to find out all I can from reliable sources in regard to artichokes and spelt. It seems to me that both are very valuable to the farmer and stock-grower and ought to be on nearly every farm.

HENRY S. JEFFERIES.

Franklin County.

I have mailed circular giving information regarding seed-corn and other seed grains, with prices. I published an article giving information regarding the culture and feeding of artichokes in the issue of the Kansas Farmer December 14, 1905. I am not acquainted with the Large or Mammoth White variety. I have only grown the Jerusalem artichokes. The latter variety is the one commonly grown and is standard.

I have sent to you a copy of a circular letter giving information regarding spelt or emmer. The acreage of emmer grown in Kansas is not large, although it is grown to some extent throughout the larger portion of the State. Emmer would not succeed so well in your county as it does in Central and Western Kansas, or even at this station. A fair average yield of emmer in this section of the State is 35 bushels (45 pounds per bushel) per acre. The average yield of emmer at this station for the past three seasons has been greater than the average yield of oats or barley.

In composition emmer is similar to barley, although in feeding-value some experiments conducted at the South Dakota Experiment Station indicate that it is hardly equal to barley as a fattening feed. If the grain is ground and mixed with other ground grains, it

Dietz Lanterns

We know that if buyers would first write us and get our lantern book and know just what service Dietz lanterns give and how they are made, they would never buy any other kind. Everybody knows about the

"Clear, White Light of the DIETZ."

But we want them to know about the convenient side lever, how impossible it is for the oil pot to leak, how it is made without suspicion of solder, how only the best class of material, glass, tin, wire, etc., is used in the making. There are a dozen things that ought to be considered in choosing. Then dealers could not persuade you to buy the ordinary lanterns on their shelves. There's a Dietz lantern dealer most everywhere. If you don't find one, write to us. Write anyhow for that free book.

R. E. DIETZ COMPANY,
67 Laight St. NEW YORK CITY.
Established 1840.

BOOK FREE **FARM TELEPHONES** How to put them up—what they cost—why they save you money: all information and valuable book free. Write J. Andree & Sons, 823 W. Wells St., Milwaukee, Wis.

\$700 Daily Av. selling Only Pump Equalizers Make all pumps work Easy. Windmills run in slightest wind. Fits all Pumps. Merit sells them. Fully Warranted. Exclusive territory. Write Equisizer Mfg. Co., Waseca, Minn., Dept. 13

FENCE STRONGEST MADE. Built strong chick-en-tight. Sold to the Farmer or at Wholesale Price. Fully warranted. Catalogue free. COILED SPRING FENCE CO., Box 255 Winchester, Indiana.

LAWN FENCE Made of Steel. Lasts lifetime. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue free. KITSelman Brothers, Muncie, Indiana, Box 399.

PAGE QUALITY Begins in our fence. There's where the first tests are made. Quality of wire first, then a practical weave. You get both in Page Fence. Let us tell you how Page-Wire is made, and how it differs from common fence wire. PAGE WOVEN WIRE FENCE CO., Box 7868, Adrian, Mich.

BOWSHER SWEEP MILLS Different from all others. Grind Corn with shucks or without. Kaffir in the head and all kinds small grain. 4 and 2 horse sizes. Geared 10 to 1 or 7 to 1. Also make 7 sizes belt mills. G. H. P. BOWSHER CO., SOUTH BEND, IND.

\$10.00 Sweep Feed | \$14.00 Galvanized Grinder. We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list. CURRIE WIND MILL CO., Topeka, Kansas.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it now. It is FREE. Austin Manufacturing Co., Chicago

SCALES ALL STYLES LOWEST PRICES. 30 DAYS FREE TRIAL. DATALOGUE. AMERICAN SCALE CO. 205 AMERICAN BANK BLDG. KANSAS CITY, MO.

25% MORE VALUE BUY SPLIT HICKORY. Hubbles and ave 2 pro fits. Factory to you. Write and tell us what style vehicle you want. 1906 Catalog, 180 pages, now ready.

IT WON'T COST YOU ONE CENT. The Grain Belt Harrow Cart Pays for itself in One Season. Why wear yourself out dragging behind a harrow in the dust and over the clods, when you can ride for nothing, do more work in a day and better harrowing. It's all in the proposition we have to make you. WRITE US TO-DAY FOR OUR FREE BOOKLET. Write the Waterloo Harrow Co., 982 Bridge St., Waterloo, Iowa.

may make a good ration for dairy cows or horses, and for growing hogs.

We have seed of emmer for sale, as stated in the circular which I have mailed you. You can also secure seed of almost any Western seed company.

The article regarding the improving of sweet corn, which you read in the Kansas Farmer was probably written by a member of some other experiment station. However, for answer on this point I shall refer your letter to Prof. Albert Dickens, horticulturist at this station.

A. M. TENEYCK.

Yellow Alfalfa—Seed-Corn.

I own a farm in Kansas near Courtland, Republic County, which I bought eighteen months ago. I have had it rented till now, but intend to make my home on it from now on. It is a good quarter section, but like most land around there has been "corned" to death for twenty-five years. I have seen some of your articles and would like to be on your mailing list when I get home. The reason I write now is to ask a favor of you. Would you kindly give me the address of some reliable man who has a few bushels of soybeans for sale? I want the beans for seed. I am going to try the crop on about five acres this spring. I intend to sow broadcast and cut for fodder shortly after the plants start to form the first pods. Is that a good way? I am not so particular to get the fodder as to enrich the soil, as I have lots of alfalfa. Please tell me what you think best.

I had my renter put in an additional 10 acres of alfalfa this last spring, in May. The soil was fall-plowed, and he harrowed it and then seeded it, then harrowed it again. It came up in splendid shape, and grew well until it had four leaves, then stopped. We had much rain last summer but the alfalfa turned yellow and just stood that way, not growing any more except a few patches here and there. I took a trip home about August and examined the ground and found that it had been fall-plowed when the weeds were very high, and they formed a regular "mulch" 4 or 5 inches below the surface. When the alfalfa roots reached the mulch they either got heated or for some other cause did not penetrate the subsoil. I have only a very poor stand here. Would it not be all right to sow seed this spring and disk it? I would like to have that particular field in alfalfa for a while. Have you any good seed-corn for sale? I would like to get some from you. Do you know any one that has large, white, seed-corn for sale?

Alaska. CHAS. ANDREN.

I have requested Prof. J. T. Willard, director of the station, to place your name on our bulletin mailing list and send you some of the recently published bulletins.

I can not give you the address of any farmer who has soy-bean seed for sale, but you can purchase the soy-beans from Western seed dealers, or we can supply you with a limited quantity of the early yellow soy-beans, the variety commonly grown in this State.

I would not recommend to grow soy-beans for fodder. Cow-peas are preferable to soy-beans if you intend to sow broadcast or plant in close drills and harvest the crop for hay or fodder. The Whippoorwill cow-peas are commonly grown in this State, and seed may be secured from seed companies. We have a limited supply of New Era cow-peas which we are selling at \$2.50 per bushel. These peas are a little earlier than the Whippoorwill and may be preferable for seed, but do not make quite so large crops of forage as the Whippoorwill. If you prefer to sow soy-beans for forage, I recommend that you plant some late-maturing variety such as the Southern, late Green, Large Yellow or the Flat Black. I have mailed to you a copy of letter answering questions regarding cow-peas for forage and green manuring.

If the alfalfa is now very thin on the ground, it is possible to thicken the stand by seeding early in the spring and by disking and harrowing to loosen the soil so that the seed may be covered. If you fail to get a renewed stand by spring seeding, it is well to seed immediately after taking off the third cutting, disking and harrowing the alfalfa-field in order to prepare a favorable seed-bed. As a rule, unless it is especially desirable to have a certain field in alfalfa, I would prefer to seed down other land and break up the field which has the poor stand, planting again to corn or other crops. The next time you sow alfalfa you should take care to prepare a proper seed-bed; see that the soil is well settled and firm, and that the furrow slice is well united with the subsoil, so that the soil moisture may come up from the subsoil and the roots of the alfalfa may have a fa-

vorable environment for spreading and growing deep in the soil.

We have some good seed-corn for sale. I have mailed circular giving information regarding seed-corn and other seed grain. We have no very large white corn. Geo. T. Fielding & Sons, Manhattan, grow and sell the Mammoth White Dent corn, a late maturing corn which has large ears and which has produced well in the tests of this Station. McAuley's White Dent corn, seed of which we have for sale, is medium late in maturing and has medium-sized ears. The Boone County White is similar to the McAuley.

A. M. TENEYCK.

Flax with Grass-Seed.

I would like information regarding the sowing of flax with grass-seed, will the grass do well sowed with flax?

Necosho County.

S. L.

As a general rule, I would not advise to use flax as a nurse-crop in sowing grass-seed. In certain sections of the State where the moisture supply is abundant this method of seeding down to grass may succeed fairly well, but usually throughout Central Kansas and in a large portion of Eastern Kansas it is safer to sow grass, alfalfa or clover without a nurse-crop. In a test of different nurse-crops for seeding grass and clover at the North Dakota Experiment Station it was found that flax gave about as good results as other spring-sown grains. Thus, where the conditions are favorable to use a nurse-crop in seeding to grass, doubtless the grass will succeed with flax nearly as well as with wheat, oats, or other small grain.

A. M. TENEYCK.

Corn-Stalk Ground for Alfalfa.

I want to sow ten acres of alfalfa this spring. The ground that I want to put the seed on is corn-stalk ground, with some burrs and weeds, but the ground is a mellow loam. Please tell me what preparation I ought to make before sowing and after, and how much seed to put on, and if the last of March is the right time to sow, providing the weather permits.

J. M. WALTERS.

Dickinson County.

I think if you will disk and harrow the land in question that you will be able to prepare a good seed-bed for sowing alfalfa this spring. The cockleburrs are not necessarily bad weeds in a field of young alfalfa, provided the weeds are mowed occasionally and kept from growing too rank and shading the young alfalfa plants. If the corn-stalks are still on the ground you could break them down, rake them up and burn them, but the stalks may be cut up with a stalk-cutter and left on the ground. We seeded a field last spring this way and secured good results. The stalks on the ground acted as a cover to break the wind, conserve the soil moisture, and prevent the ground from puddling and baking by heavy rains. The corn-stalks bother some when the alfalfa is cut and raked the first time, but usually there is little growth of alfalfa the first season, and because of the presence of weeds it is not usually saved for hay. But the second year the corn-stalks have largely disappeared.

No treatment needs to be given the land after sowing other than a single harrowing to cover the alfalfa-seed if it is sown broadcast. Twelve to fifteen pounds of good seed per acre is sufficient to sow. Last spring we sowed on March 15 with good results. It depends somewhat upon the season and weather conditions as to what date you should sow. Usually I recommend early seeding, as soon as the soil is in fit condition to sprout the alfalfa seed. There is some danger of late frosts injuring early-seeded alfalfa, but the danger from frost by early seeding is not so great as the danger of damage from heavy rains and hot sun to late-seeded alfalfa.

A. M. TENEYCK.

Kherson Oats—Cow-Peas.

Will you please tell me what you think of Kherson oats. Is it a good variety and where may I secure seed? Can I raise cow-peas for seed here? When should cow-peas be sown and how much will the crop yield per acre? How are the peas harvested? Can they be cut with the grass mower?

JACOB J. HUBERT.

Marion County.

I have mailed circular giving information regarding seed-corn, including varieties of oats tested at this station. You will observe that the Kherson oats have stood second in yield as the average for three years' test. Some twenty different varieties have been grown in these experiments each year. I believe either the Kherson or Sixty-day oats will prove to be better producing oats throughout Central Kansas than almost any other variety unless it be the Tex-

as Red. I would advise that you try the Kherson oats in a small way. Seed may be secured from this station at \$1.25 for a single bushel or six bushels for \$5, with extra charge for sacks. The Kherson oats are also sold by Western seed companies.

Certain varieties of cow-peas may be grown and matured successfully for seed in Marion County. Such varieties as the New Era, Whippoorwill, Black-eye, Lady, Wonderful, and Warner's Early. You can secure seed of one or more of these varieties from Western seed companies. The Whippoorwill is the standard variety sold and grown in this State. We can supply you with a limited quantity of seed of the New Era cow-peas, an early maturing sort and a good producer of grain, price \$2.50 per bushel.

I have mailed circular letter giving information regarding the culture of cow-peas. Briefly answering your questions directly: When sowing for seed, cow-peas had best be planted about the middle of June on a well-prepared seed-bed, in rows 2½ to 3 feet apart, dropping the peas 1 to 2 inches apart in the drill-row. Planted in this way the peas will vine and some of the vines lie on the ground, making it necessary to harvest the peas with a bean harvester; or they may be pulled by hand and put in small bunches, as is practiced in harvesting beans. When the bunches are thoroughly cured the peas may be hauled to the barn and thrashed with a flail if the purpose is to save the grain for seed. For feeding purposes the peas may be thrashed with an ordinary grain-separator. A thrashing-machine, however, breaks the peas badly and injures them for seed. If the cow-peas are planted in close drills or sown broadcast, the plants grow erect and the crop may be readily cut with a mower, but when grown this way the peas do not seed well and I would only recommend this method when you wish to harvest the crop for hay.

A. M. TENEYCK.

Smut in Wheat.

I live in Brown County, Kansas, but I own a section of land in Sheridan County, which is farmed by a tenant. Last year I furnished enough macaroni to sow 50 acres, and when harvest-time came, fully one-fourth of it had what is called stinking smut in place of sound grains. I have been told that the seed can be treated to prevent that. If you will kindly publish the formula in the KANSAS FARMER, I will appreciate it.

ANTONIO SCALAPINO.

Brown County.

It is true that seed wheat may be successfully treated so as to destroy smut and give practically a clean crop from smutty seed. The best remedy for smut in wheat is to treat the seed with a solution of formaldehyde, using one pound 40 per cent strength of formaldehyde to 45 to 50 gallons of water. Either spray the wheat or dip it in a barrel or tank, taking care that the grain be thoroughly wet, then spread it quite thinly over the floor and allow it to dry from twelve to twenty-four hours, shoveling it over once or twice. The usual method is to treat one day the seed that is to be sown the next day. The wheat will swell, and in order to sow the required amount per acre the drill should be set to sow about 1-5 to 1-4 more than the usual amount.

The purpose of this treatment with formaldehyde is to destroy the smut spores which adhere to the wheat kernels. When smutty wheat is thrashed the smut grains break and the fine smut dust, which is really the seeds of the smut is spread over the sound kernels of wheat. Some of these little smut seeds or spores adhere to the wheat kernels and when such wheat is planted these spores sprout and the fungus plant grows into the wheat plant, the smut plant feeding on the sap and tissues of wheat plant, finally producing the smut in the head of the wheat in place of the wheat kernels. If these smut spores adhering to the wheat grains are destroyed, there is little chance for the smut spores which remain in the soil to come in contact with the wheat kernels or the young growing wheat plants, hence the seed-wheat treated with a solution of formaldehyde produces a crop which is practically free from smut.

There is no danger of injuring the seed by using formaldehyde of the strength of solution described above. In fact, experiments have shown that the treatment actually improves the wheat. As an average for a large number of experiments at the North Dakota Experiment Station, Prof. L. H. Bolley found that treating sound wheat free from smut with the formaldehyde solution, gave increased yields as compared with the untreated seed by over two bushels per acre. Every

Nervous Women

Their Sufferings Are Usually Due to Female Disorders Perhaps Unsuspected

A MEDICINE THAT CURES



Can we dispute the well-known fact that American women are nervous?

How often do we hear the expression, "I am so nervous, it seems as if I should fly;" or, "Don't speak to me." Little things annoy you and make you irritable; you can't sleep, you are unable to quietly and calmly perform your daily tasks or care for your children.

The relation of the nerves and generative organs in woman is so close that nine-tenths of the nervous prostration, nervous debility, the blues, sleeplessness and nervous irritability arise from some derangement of the organism which makes her a woman. Fits of depression or restlessness and irritability; spirits easily affected, so that one minute she laughs, the next minute weeps; pain in the abdominal region and between the shoulders; loss of voice; nervous dyspepsia; a tendency to cry at the least provocation.

Nothing will relieve this distressing condition and prevent months of prostration and suffering so surely as Lydia E. Pinkham's Vegetable Compound.

Mrs. M. E. Shotwell, of 103 Flatbush Avenue, Brooklyn, N. Y., writes:

"I cannot express the wonderful relief I have experienced by taking Lydia E. Pinkham's Vegetable Compound. I suffered for a long time with nervous prostration, backache, headache, loss of appetite. I could not sleep and would walk the floor almost every night."

"I had three doctors and got no better, and life was a burden. I was advised to try Lydia E. Pinkham's Vegetable Compound, and it has worked wonders for me."

"I am a well woman, my nervousness is all gone and my friends say I look ten years younger."

Will not the volumes of letters from women made strong by Lydia E. Pinkham's Vegetable Compound convince all women of its virtues? Surely you cannot wish to remain sick, weak and discouraged, exhausted each day, when you can be as easily cured as other women.



SEED CORN

There are many points to be considered in selecting seed corn; some of the most important are outlined in the above cuts; namely, well filled out at butt end with small to medium sized shank; the tip of ear well capped or covered over with fair sized grains; the kernels should be wedge shaped from cap to where it rounds off at point or germ end, and the rows should be close together but still not so tight as to smother the germ and cause mold. The grain must be deep and set on a small cob which is of such texture that it will dry out easily and quickly. These points are all brought to perfection in the new

GOLDEN WEST

It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue, illustrating and describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seeds. Mailed free if you mention this paper.

IOWA SEED CO., DES MOINES, IA.



FREE

To introduce our up-to-date jewelry we will give away, absolutely free, this handsome Perfumed Lucky Charm, the latest novelty. Send your name and address to-day and we will forward it to you at once without expense to you. Wear one and be in luck all the time. Address,

MILFORD JEWELRY CO., Dept. 1145 Milford, Conn.

The Farmers Road To Wealth

lies in adopting up-to-date ideas and implements. The 1906 idea in the way of an implement is the

IOWA HARROW CART

A money saver. A time saver. A labor saver. Means better harrowing. Less work. More corn. Use or abuse doesn't wear it out. The right cart at the right price. Write us today.

IOWA HARROW CART CO.

132 West St., Waterloo, Iowa.

farmer who has smut in his wheat ought to treat the seed. There is no use in growing smutty wheat. The formaldehyde may be purchased from almost any druggist, at least any druggist can secure it for you. Be sure to get the full 40 per cent strength of formaldehyde.

A. M. TENNEYCK.

Ration for Brood Mares.

EDITOR KANSAS FARMER:—I would like to have the cheapest and most beneficial ration for my brood mares from the following: Corn, 40 cents per bushel; Kafir-corn, 28 cents per bushel; barley, 32 cents per bushel; bran, 75 cents per hundredweight; shorts, 85 cents per hundredweight; cottonseed-meal, \$1.50 per hundredweight. I have a sweep grinder if it may be used to any advantage.

I have enough alfalfa hay to feed one meal per day, plenty of cane and Kafir-corn forage, a little prairie hay. The mares weigh from 1,200 to 1,400 pounds, are in good, healthy condition, and will have their colts in May and June. They are to begin working on sod plowing and putting out spring crops.

What would be a good feed for their colts while running with dam? Would you advise turning out on pasture during the night as soon as grass is good, and feeding alfalfa hay at noon?

C. W. HUMFREY.

Comanche County.

Mares of this size in good healthy condition should be able to perform a reasonable amount of spring work and still raise a good colt, if properly nourished and if proper attention and care are given both colt and mare. Of course, we can not expect brood mares to do quite the work that regular work teams could do and will have to plan the work accordingly.

With the feeds suggested and the prices given, corn will necessarily be the basis of the grain-ration and I would suggest that some Kafir-corn might be used if it can be ground fine. A ration composed of about two-thirds corn, or corn and Kafir-corn mixed, and one-third bran will make a very satisfactory grain-ration. I would not feed either shorts or cottonseed-meal. Alfalfa hay once a day is also an excellent addition to the ration. For the sake of variety would suggest that a feed of cooked barley might be given once a week. Good bright cane and Kafir forage or prairie hay will go well for the balance of the roughage.

After the work season begins you must feed your mares a good grain ration and not too heavy on roughage. Feeding work-horses too much hay is a common fault of the average farmer. The mares should not be compelled to make heavy pulls or work excessively hard beforehand but will do ordinary work almost up to the time of foaling. They should not be deprived of exercise even when taken from work as foaling time approaches. If all goes well with mare and colt, work may begin in about two weeks after foaling. I do not think it is ever advisable to allow the colts to run with the dams. A far better plan is to give the colt a good, roomy stall, preferably several colts together, and during the first month bring the mares in to suckle the colts in the middle of the forenoon and again in the middle of the afternoon. If the mares should come from work very much heated, it is better not to allow the colts to suckle at once, as serious results to the colts may follow. The colts should be induced to eat some grain as soon as possible. They will soon do this if allowed to stand by the mother when she is eating. The grain ration for colts should contain a little more bran and it would be well to have some oats to take the place of part of the corn.

I would certainly advise turning out on the pasture during the night although you must not expect work horses to depend upon pasture-grass for any great proportion of the feeding nutrients required. The open air exercise and the small nap of grass will keep them in good condition and is absolutely necessary for the welfare of the colt. I would not feed very much hay to the mares at noon while working, as it is preferable to give the bulk of the hay at night when they have more time to masticate and digest it. Mares of this size will probably require from twelve to fifteen pounds of grain a day to keep them in good condition.

G. C. WHEELER.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Early-matured stock are raised at a greater profit than those maturing slowly.

A dull, sunken eye shows defective nutritive power and lack of constitution and vigor.

A good appetite, power to digest, and



ARE YOU READY FOR HARVEST

How about it?

Old Mother Earth, the sun and the showers, the dews and the winds are doing and will do their part to produce the wheat and oats and rye and barley that go to make a bountiful harvest.

Are you doing your part?

Are you getting ready to *harvest* the crop after it is grown?

Do you know *how* you will cut your grain?

Are you sure you will harvest it to the best advantage—with the least loss of grain, the least waste of time, the least trouble and worry and expense?

These are mighty important questions, for a large share of your *profit* depends upon them.

It's not too early to begin to think about them.

With high priced land and high priced labor, you need to get every cent from every acre you cultivate.

Help will be scarce and expensive; therefore, you need a harvesting machine that will save you the most labor.

Harvest days are few; therefore, you need a harvesting machine that will save you the most time.

Grain is worth money; therefore, you need a harvesting machine that will save you the most grain.

You can't afford to run risks.

You can't afford to take chances.

And you don't have to.

Take an hour or two, now, before you get too busy and talk to any agent of the International Harvester Company of America, and find out about the International line of harvesting and haying machines for 1906.

You'll be interested whether you buy or not.

* * * *

Buying a machine of any kind for use on the farm is not as simple a matter as it may seem.

You can "size up" a farm and know pretty accurately how much an acre you can afford to pay for it, but unless you are a mechanical expert you can't judge a machine in the same manner.

You have to take other things into consideration.

For example:

You need to know something about the design—the mechanical principles—how the machine works.

You need to know something about the materials used in it.

You need to know something about the skill used in its construction.

You need to know something about the responsibility of the man behind it and about the machine's reputation.

The International Harvester Company line of machines for 1906 will satisfy you on these points—and on every other point that you may bring up.

* * * *

Bigness is not necessarily a merit in itself.

If you're buying a horse you don't care very much whether the man who raised it, raises one colt a year or 500.

But you know that the man who makes a specialty of horse breeding is more likely to raise a hundred good colts, than is the man who goes at

provement and every device that mechanical genius can contrive will be employed in their line.

2nd.—The materials are right.

By co-operation they are able to own, control and operate their lumber camps, their own saw mills, their own coal and iron mines, their own coke ovens, their own steel mills, relieving them of the necessity of depending upon the uncertain and fluctuating steel markets, coal markets, lumber markets, etc., for their raw materials, and insuring them at all times an abundance of materials which they *know* to be right. These are added reasons for the superiority of these harvesting machines.

3rd.—The workmanship is right.

The demand for these six leading makes of harvesting machines enables their manufacturers to maintain manufacturing plants of the highest efficiency and to employ workmen of the highest skill—factories and workmen which could not by any possibility be maintained to supply a small demand.

4th.—Their reputation is right.

The fact that so many farmers cannot be persuaded to buy any other—the fact that so many farmers continue to buy them—the fact that they are considered the standard wherever grain is grown in every part of the world is sufficient indication of their reputation and their reliability.

You probably need one of these harvesting machines.

You cannot afford to begin harvest with a machine that is liable to break down and cause you several days' delay.

You cannot afford to use a machine that loses a few stalks now and then and a whole sheaf here and there, for a little leak like that eats into your profits at a surprising rate.

Go to the dealer *now*, and get which ever catalogue you want.

If you don't know an International Dealer—write to us for the name and address of one nearest you.

International Harvester Company of America, (INCORPORATED) Chicago, Illinois.

International Line—Binders, Reapers, Headers, Header-Binders, Corn Binders, Corn Shockers, Corn Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Balers, Kaffe Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber, Columbus and Bettendorf Wagons, Illinois Twine.

ability to assimilate food are the basis of a good feeder.

As long as an animal eats with a good appetite and maintains good thrifit the correct quantity is being supplied.

There is a difference between feed for promoting growth and that for making fat. Grow the animal before fattening.

The most successful farmers study every means of increasing the comfort of their stock and lessening the cost of keep.

A variety of feed is best for live stock because they eat it with more relish; besides, in a variety will be found all the elements of nutrition.

Excessive fat is detrimental to breeding stock and the food should consist of those elements that assist in promoting growth rather than fat.

The foundation-stones of good farming are rotation of crops, saving the manure, sheltering the stock, and economy in feeding.

Plan out the season's work so that no available force will go to waste and so that there shall be no expense for maintenance without the direct result in labor.

If a little clearing, a little ditching or draining, a little enriching, or a little picking up is done each year, the farm can be steadily improved. But if

the farm suffers a little neglect each year, it will soon run down.

Selling milk from the farm robs the land to nearly as great an extent as does wheat; but where cream only is sold, and the skim-milk fed, the loss of fertility is very small.

If the fences are always kept in good repair, the stock does not so readily learn to be brachy, and as much depends upon training your stock as on building the fence properly.

Properly managed, a rotation of crops utilizes all of the elements of fertility in the land, and gives that rest and change of diet which are as necessary to land as to stock or man.

Stock Interests**PURE-BRED STOCK SALES.**

Dates claimed only for sales which are advertised or are to be advertised in this paper.

Feb. 22-23, 1906—Manhattan, Kans., Percherons. Henry Avery & Son of Wakefield, Kans.

Feb. 24, 1906—Poland-China bred sows, H. E. Lunt, Manager.

Feb. 24, 1906—Poland-Chinas, at Wichita, Kans. by H. E. Lunt, Burden, Kans.

February 23, 1906—Duroc-Jerseys by J. F. Staadt, Ottawa, Kans.

February 23 and March 1, 1906—C. A. Tannard, Gudell & Simpson, Kansas City, Mo. His Herd.

March 1, 1906—Shorthorns, L. R. Straw, Valley Falls, Kans.

March 13, 1906—40th Poland-China br d & ws, and 45 Shorthorns, C. S. Nevius, Chillicothe, Ill.

March 13, 1906—Shorthorns and Poland-Chinas by C. S. Nevius, Chillicothe, Kans.

March 20-22, 1906—Combination sales of Shorthorns, Herefords, Aberdeen-Angus and Herefords at Kansas City; R. A. Ford, Manager, Lawson, Mo.

March 28, 1906—Shorthorns by Shawnee Breeders Association at Topeka State Fair Grounds, J. D. Graham, Secretary, Topeka, Kans.

April 3, 1906—James Stock Farm, Willard, Kans., trotting bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Glifford, Wakefield, Kans.

May 18, 1906—Geo. Allen, Omaha, Neb., Shorthorns.

Animal Dentistry.

By Dr. T. W. Hadley, Late Professor of Animal Dentistry, Western Veterinary College, Before the Sixteenth Annual Meeting of the Kansas Improved Stock-Breeders' Association.

The thrift and health of our domestic animals depend largely on their ability to assimilate or convert their

venience. But not until about twenty years ago did I find any one who pretended to furnish the relief I felt sure could be furnished. When I saw this man do the work I became an enthusiast on veterinary dentistry, and now they call me a "tooth crank," an accusation to which I plead guilty. Perhaps as good an illustration as I could give you of what has happened and might have been avoided is the case of the once very noted trotting stallion, Ethan Allen, who at his death and for some years before was owned by Sprague & Akers, on a farm near Lawrence, Kansas, just under the hill of the University. The history of his case is that some three years before his death he began to go down in flesh, and was treated by the veterinarian for general debility, but to no avail. He became very emaciated and finally died, and was buried on the farm. Some years after, his bones were dug up, cleaned and mounted, and placed in the Museum of Natural History of the State University. On visiting the museum I saw the skeleton, and being told whose it was, I naturally examined it closely, and there found the cause of his decline and death. It was all from defective teeth. At some time he had lost the fourth lower molar or grinder on the right side. This left nothing to oppose the corresponding one above so there was no wear on it, and it grew down until it came in contact with the lower jawbone and cut a notch in the bone three-fourths of an inch deep and fully an inch wide at

thoroughly competent; because an incompetent man can do you more damage than good. Never employ one of the traveling fellows styling themselves "veterinary dentists," or "horse dentists;" for if they are as proficient as they claim to be, they would not need to travel to get business. Any man who is a good man at the profession can locate himself and do work that will create a demand for his services that will keep him from traveling. Never allow a man to operate on your stock without a mouth speculum, an instrument made for holding the mouth open. There are several patterns in use that are good. There are several reasons for this; for instance, a man can see and know what he is doing; another is, that the animal being operated on without one will shut down on the forceps, and crush or split a tooth and cause trouble and expense.

DISCUSSION.

Mr. Terry: I think that if farmers as a class, stockmen and horsemen especially, will study this subject of veterinary dentistry they will be surprised. I venture to say that not two horses in five will not have defects in their teeth. I expect I have examined a thousand horses for that purpose and I do not believe there is a man here who has not made examination himself that has the least idea how many horses are ruined by diseased teeth. Everything that passes between those teeth causes that horse pain, the same as it would a man or anything else. I



Hector (30020) 2005, a beautiful bay Belgian. Three years old. Imported and owned by the Lincoln Importing Horse Company, Lincoln, Neb.

food into bone and muscle or flesh. In order to obtain proper assimilation, the food must be well digested. The preparation of the food for digestion begins in the mouth by mastication or chewing. During this act of mastication the food is also salivated, which also assists in digestion. If there should, perchance, be some defect in an animal's teeth, he certainly would be unable to properly masticate his food, and as a result digestion would be poor and the animal unthrifty.

Animals that are in this condition are often called "runts," "raw-boned," "rough," etc., when all that ails them is some defect in their teeth. The attendant will say he can not see why they are smaller and thinner than the others, for he knows they consume as much or more than the others in the lot or bunch, which is a fact.

Dentistry in the domestic animals has always appealed to me as a necessary and sensible procedure. I have been placed in close contact with them as far back as I can remember. My father was in the butcher business from the time I was a small boy and until his death, and I naturally learned the butcher's trade. In working at this trade—especially while doing the slaughtering—I had a chance to see a great many dental defects, and while yet a young lad I often wondered if there could not have been some means by which the poor animals could have been relieved of a great deal of suffering and inconvenience. When in later years I quit the butcher business and started handling horses in various ways, I saw more suffering and incon-

venience. Think of the suffering! Think of the relief that might have been given him with a few minutes work at a small expense.

In my practice I find every day some poor animal suffering more or less from some dental trouble; and it covers all the domestic animals from the cat to the horse. While in college I even helped to extract three decayed teeth from a large male lion in Hagenbach's menagerie.

I would like to impress on every member of the State Improved Stock-Breeders' Association the necessity and benefit of looking after his animals' teeth. It will save money in feed-bills, anxiety of mind, and afford much satisfaction.

Among the many symptoms or signs of disordered teeth that will be noticed are unthriftness or loss of flesh, rough, staring coat, slobbering, holding the head to one side while eating or drinking, quidding, or chewing hay or fodder into wads and spitting it out, and refusing to feed for days at a time. There are so many things that may go wrong in an animal's mouth that I hardly dare to enumerate them. A tooth may start to decay at the roots and show no sign of it on the outside. There may and often does occur an elongated tooth, as in the case I have already mentioned; teeth often get split by biting on some hard substance taken into the mouth with food, and in many other ways. But any competent veterinarian will find these numerous troubles on examination. When employing a man to do dental work on your animals be sure he is

do not believe two horses in ten but have defect of some kind in their teeth.

A Member: Will you let the hog in?

Professor Harvey: I have extracted decayed teeth from the hog.

Mr. Heath: I would like to ask which class of animals have the greatest trouble with the teeth?

Professor Hadley: Cattle and horses. Do not forget your cattle, gentlemen.

Mr. Coburn: Suppose a horse is found with a split tooth—should that tooth be pulled out?

Professor Hadley: Yes, sir.

Mr. Coburn: (To Mr. Terry) you agree with Professor Hadley that this is the only treatment?

Mr. Terry: Yes, sir.

A Member: You state that sometimes the root of the tooth is ailing. How do you find that?

Professor Hadley: You will find some trouble with his eating in the first place. We use a small mallet and tap the teeth, and when you come to the one which is decayed you will find it out. The horse will tell you.

Armour's Beef Meal.

Will you please give me the composition of Armour's beef meal if you have it and its feeding-value for brood sows and growing pigs, also what you consider it worth per hundred pounds compared with alfalfa hay at \$5 per ton.

P. W. HOLM.

The following analysis of Armour's fine meat meal has been made by Prof. J. T. Willard, director of the Kansas Experiment Station: Crude protein, 66.15; ether extract, 13.26; ash, 7.28. At the prices at which the various meat

More Pounds of Rich Butter

can be made in any given time, from any given herd of any given breed—if the cows regularly receive small doses of Dr. Hess Stock Food, night and morning. Feeding cows to the limit of their digestion, which is so essential, is attended with no bad results, and stock of all kinds put on increased weight when fed

DR HESS STOCK FOOD

TONIC
the prescription of Dr. Hess (M.D., D.V.S.). It contains tonics for the digestion, iron for the blood, nitrate to expel poisonous materials from the system, laxatives to regulate the bowels. The ingredients of Dr. Hess Stock Food have the endorsement of the Veterinary Colleges and the Farm Papers. Recognized as a medicinal tonic and laxative by our own Government, and sold on a written guarantee at

5¢ per pound in 100 lb. sacks; except in Canada and extreme West and South. 25 lb. pail \$1.60.

A tablespoonful per day for the average hog. Less than a penny a day for horse, cow or steer.

If your dealer cannot supply you, we will.

DR. HESS & CLARK,
Ashland, Ohio.

Also Manufacturers of Dr. Hess Poultry Panacea and Instant Louse Killer.

Fistula and Poli-Evil

Any person, however inexperienced, can readily cure either disease with

Fleming's

Fistula and Poli-Evil Cure
even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket Veterinary Adviser

Write us for a free copy. Ninety-six pages, covering more than hundred veterinary subjects. Durably bound, indexed and illustrated.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to **W. O. THURSTON,**
Elmdale, Kansas.

HOG CHOLERA

Free remedy for 30 days. I am going to prove to the hog raiser of this country that I am offering him the remedy he has been looking for. Send me your name and I will send you a regular \$1.00 package for trial

W. E. VINCENT,
Prop. Elm Lawn Stock Farm,
Hutchinson, Kans.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. DAVIS CO., Tippecanoe City, Ohio
Send your orders quick.

Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO.,
Salem, Ohio.

meals are sold for feeding-purposes, they certainly supply a very cheap source of protein. The value of tankage or meat meal is being experimented with by a number of Experiment Stations in growing and fattening of swine as a complement to corn and with most favorable results. In every case where hogs have been fattened on corn and tankage the gains have been made more cheaply than upon corn alone. The Kansas Station has just completed a feeding-test of corn and tankage and marketed the hogs at the age of nine months at an average weight of 325 pounds. These hogs have gained during the 112 days of the experiment at the rate of 1.75 pounds per head daily. The gains have cost \$4.07 per hundred-weight with tankage at \$40 per ton and corn at 35c per bushel. A similar lot fed the same period upon corn alone have gained at the average rate of one pound per day and the gains have cost \$4.32 per hundredweight. The tankage-fed hogs also brought a higher price on the market. I do not feel prepared to speak so definitely as to its value for brood sows and growing pigs. An experiment will soon be made at this station to test the value of tankage with younger pigs. For the feeding of brood sows I regard alfalfa hay as being very valuable and would give them all the alfalfa hay they will eat of the best quality obtainable. They will keep in a more healthy and vigorous condition than when they are confined to a ration of corn only. A little tankage may also be of value to the brood sows as a means of supplying protein, so necessary for the development of the young pigs, but I would not feed it to the exclusion of alfalfa.

G. C. WHEELER.

Comparative Feeding-Value of Mangel Wurtzels.

As you are an authority on animals and feeds for the same, can you give me the relative feeding-value of cow beets or mangel wurtzels as compared with bran at \$16 per ton, corn-chop at \$15, alfalfa \$7 to \$8, according to color and stage in which cut or cured, oil-meal, \$1.65 per cwt? What ought to be the price per ton of beets as compared with above?

W. R. STATES.

Owing to the ease with which corn can be grown and its large yields of both grain and forage, the growing of root crops for feeding-purposes is not nearly so common in the United States as with the English and Canadian feeders.

The Ohio Experiment Station reports a yield of sugar beets as high as 16 tons per acre on land which will produce 60 bushels of corn per acre. They estimate that it cost \$2 per ton to raise, harvest and place these in the cellar. The yield in Canada of mangels and carrots is at the rate of 13 1/2 tons per acre; the cost of producing and storing reaching about \$2.50 per ton.

Various experiments in Europe and some in the United States indicate that root-crops will replace grain in the ration at the rate of about ten parts of roots to one of grain, these being the averages of a large number of experiments. With this as a basis and the value for grain-feeds as given, root-crops will be worth at least \$2 per ton for feeding-purposes.

Studies in the carcasses produced by heavy feeding of root-crops show that the dressed weight in cattle, sheep, and hogs show in every case a greater shrinkage than where grain is fed. The carcasses of root-fed animals show less fat and are more watery than those from dry feeds. For young animals and

Dollar Package FREE Man Medicine Free

You can now obtain a large dollar size free package of Man Medicine—free on request.

Man Medicine cures man-weakness.

Man Medicine gives you once more the gusto,

the joyful satisfaction, the pulse and throb of physical pleasure, the keen sense of man-

sensation, the luxury of life, body-power and

body-comfort—free. Man Medicine does it.

Man Medicine cures man-weakness, nervous debility, early decay, discouraged manhood, functional failure, vital weakness, brain fag, backache, prostatitis, kidney trouble and nervousness.

You can cure yourself at home by Man Medicine, and the full size dollar package will be delivered to you free, plain wrapper, sealed, with full directions how to use it. The full size dollar package free, no payments of any kind, no receipts, no promises, no papers to sign. It is free.

All we want to know is that you are not sending for it out of idle curiosity, but that you want to be well, and become your strong natural self once more. Man Medicine will do what you want it to do; make you a real man, man-like, man-powerful.

Your name and address will bring it; all you have to do is to send and get it. We send it free to every discouraged one of the man sex. Interstate Remedy Co., 1448 Luck Bldg., Detroit, Mich.

The cattle that will be sold at this

breeding stock this is a desirable condition. Animals running on pasture likewise show a more watery carcass and also lay on flesh at less cost for feed consumed. The feeding of root crops to this class of animals will tend to keep them in a more healthy and vigorous condition. The firm, hard flesh produced by dry grain feeding is certainly not conducive to vigorous young at birth and I believe that some form of succulent feed is most desirable for feeding breeding animals. Looking at it from this standpoint, roots have undoubtedly a higher feeding-value than would be indicated by the digestible nutrients they contain.

You do not state definitely what class of animals you are feeding, so a more precise answer could not be given; however, you can safely estimate that roots are worth at least \$2 and possibly somewhat more per ton for supplying a little succulence to maintain breeding animals in the best of condition during the winter season.

G. C. WHEELER.

Standard Poland-China Association Meeting.

The Standard Poland-China Record Association held its annual meeting in the Live Stock Exchange building at South St. Joseph. The meeting began with a banquet at the splendid new Transit House on the evening of February 13, where about 50 members of the association met a large number of business men and stockmen. Manager M. B. Irwin, of the St. Joseph Stock Yards, acted as toastmaster and did himself proud. Those who were present all bear testimony to the good things found upon the table and the better things found in the toasts which followed. February 14 was devoted to the business meeting. The report of the Treasurer showed the affairs of the association to be in a very healthful condition. The receipts of the past year amounted to \$9,562.16, and the balance now in the treasury is \$9,175.22.

President Hayzlett, in his annual report said:

"At our last annual meeting 582 shares of stock had been sold. We now have 650 shares of stock sold. I desire to compliment the directors on their wise and judicious management of the association's business during the past year. They have fully sustained the previous record and have been faithful to their trust. The Standard has had a remarkable growth during the past year, doing a business of \$9,416.66, which is marvelous. From an examination of the books at the secretary's office I find receipts disclose a feature of prosperity that is interesting to note which you will please observe from the secretary's report."

With Kansas City and Maryville both extending invitations and offering inducements for the next annual meeting, the Standard Poland-China Record Association voted to hold the next meeting in St. Joseph.

The election of president and board of directors for the ensuing year resulted as follows:

A. B. Garrison, Beattie, Kans., president.

Directors—W. T. Garrett, Maryville, Mo., chairman; B. R. Woodford, Shenandoah, Ia., secretary; E. E. Axline, Oak Grove, Mo.; John Blaine, Pawnee City, Neb.; John McKelvie, Plymouth, Ill.; C. F. Hutchinson, Bellaire, Kans.; W. T. Robertson, Lynd, Minn.

The newly elected directorate held a meeting in Maryville last night for the appointment of a secretary and treasurer and transaction of other business.

Each State in the association has a vice-president as follows: James Johnson, Arizona; W. W. Wilson, Illinois; J. T. Paynter, Kansas; C. B. Allen, Mississippi; H. H. Wing, New York; P. W. Peterson, South Dakota; T. M. Horsfall, Arkansas; W. A. Paxton, California; J. W. Jones, Iowa; O. B. Findley, Indiana; James Balingen, Colorado; L. L. Brooks, W. S. Parker, D. B. Garrott, Kentucky; G. W. Giles, Nebraska; G. E. Hayden, C. C. Williams, Washington; T. B. Gish, Wyoming; J. F. Bishop, Indian Territory; W. L. Davis, Ohio; H. E. Carver, Missouri; G. A. Swanson, Idaho.

Kansas City Hereford Sale.

In again calling attention to the sale to be held in Kansas City, Mo., February 28 and March 1, it is with the hope that intending purchasers of Herefords will not overlook the fact that this will be an opportunity that may not again present itself for a long time to come.

Every one of the sixteen contributors to this sale, is a breeder of high standing and is reliable in every sense of the word, and when such breeders thoroughly guarantee every animal that they sell, the buyer takes no chance whatever, for if any animal proves not to be just as represented or a breeder under reasonably good subsequent treatment, the purchase price is refunded or an animal of equal value is given instead of same.

The cattle that will be sold at this

SLOAN'S LINIMENT

For Your Family and Your Horse
The Best Antiseptic Known.

TRY IT FOR
Rheumatism, Strains,
Sprains, Swellings
and Enlargements.
Price, 25c., 50c. and \$1.00.

Dr. EARL S. SLOAN,
615 Albany St., Boston, Mass.

It Will Pay You To Investigate

the merits of the

"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.



This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305 Kansas Avenue, Topeka, Ks.

Real Fence Economy

consists of getting the greatest possible fence value for the money expended. We offer you the best fence value obtainable and here is why we can do it.

We Sell Direct from Factory to the user of the fence. Thus we avoid all unnecessary and expensive handling and storing and cut out all profits and commissions of go-betweens. This makes a large saving. It enables us to spend more for good material and proper construction.

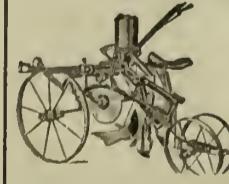
The Continuous Stay is what gives Advance Fence its superior strength. In Advance Fence the stay is never cut but runs continuously up and down across the fence for many rods without an end. Thus we preserve and utilize all the strength of the wire about half of which is wasted in fences with cut stays. Our method of construction costs a little more but it's worth while.

30 Days' Free Trial. Place your order with us for what fence you need and if after examining it you do not like it you can return it at our expense and get your money back. Don't you think this is a fair offer?

We Prepay Freight and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices.

ADVANCE FENCE CO.
3773 Old Street Peoria, Ill.



The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1310 West 13th Street. - - - KANSAS CITY, MISSOURI

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40
Made of the best Soft Carbon Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for extra share \$1.75

16-inch Only \$8.95 Extra Share \$2
12 in. Hard Steel Castor-Coulters
With share \$1.25 HAPGOOD PLOW CO., 27 Front St., Alton, Ill.
13 in. " 1.50 The only Plow factory in the United States selling direct to the farmer

get ready for spring work.

time have been carefully selected and buyers will have the opportunity of securing as good blood as there is to be found in the herd Book; and, as there are going to be about 100 head in this sale it is not the expectation of the contributors that record prices will be received, but on the contrary they rather fear that selling so many, the animals will not bring what they should bring, so it is really believed that there are a number of rich bargains in store for the breeders who attend.

Do not overlook this important sale, but by all means arrange your affairs at home and be on hand.

The sale will be under the management of Secretary C. R. Thomas, Kansas City, Mo., who will be glad to answer any questions relative to the same or furnish catalogue upon application, and should any parties who are unable to attend like to send a bid upon anything in the catalogue, Mr. Thomas will take pleasure in receiving the same and following instructions to the letter.

Leon Calhoun's Poland-China Sale.

The Leon Calhoun sale at Atchison was well attended by breeders and resident farmers. A splendid crowd greeted the auctioneer at the opening of the sale, and it took very few minutes to demonstrate that they were there for business. The principal attractions were there for business. The principal attractions were the good sows and gilts bred to the great bred boar, Prince Darkness. The top was a splendid gilt by The Picket bred to Prince Darkness, going to the good breeder, Frank D. Winn, at Mastin, Kansas, who bred both the sire and the boar to which she was bred. The entire offering went to buyers as follows:

	Price.
1. B. P. Wagner, Atchison, Kansas	\$35.00
2. H. L. Brewster, Halls, Mo.	36.00
3. R. P. Wagner	34.00
5. H. M. Kirkpatrick, Walcott, Kansas	51.00
6. John Bollin, Leavenworth, Kansas	50.00
7. Guss Aaron, Leavenworth, Kansas	42.00
8. H. L. McKelvie, Fairfield, Neb.	50.00
9. Frank D. Winn, Mastin, Kan.	100.00
10. J. Volk, Cummings, Kan.	34.00
11. J. A. Brown, Atchison, Kan.	33.00
12. Frank Hummell, Everest, Kan.	39.00
13. Joe Juencke, Farmington, Kansas	36.00
14. A. J. North, Doniphan, Kan.	36.00
15. F. E. Mueller, Breckenridge, Missouri	38.00
16. Guss Aaron	45.00
17. B. P. Wagner	55.00
18. B. P. Wagner	29.00
19. B. P. Wagner	40.00
20. A. Bettram, Bendena, Kan.	32.00
21. John Bollin	67.50
22. H. M. Graves, Atchison, Kan.	36.00
23. J. A. Buttram	35.00
24. Fred Juencke, Farmington, Kansas	25.00
25. C. O. Nyhart, Cummings, Kansas	38.00
26. J. E. Perrin, Huron, Kan.	39.00
27. J. E. Perrin	37.00
28. J. A. Brown	30.00
29. J. J. Braniff, Atchison, Kan.	40.00
30. H. L. Brewster	34.00
31. Klaus Brothers, Bendena, Kansas	26.00
32. C. E. Brenner, Atchison, Kansas	31.00
33. J. Juencke	26.00
34. H. M. Graves	34.00
35. John Bollin	34.00
37. A. M. Wilson, Halls, Mo.	26.00
38. M. S. Babcock, Nortonville, Kansas	25.00
39. H. L. Brewster, Halls, Mo.	26.00
40. Lewis Nyhart, Cummings, Kansas	26.00
41. Fred Juencke	36.00
42. J. H. Eyman, Wetmore, Kan.	34.00
42. J. E. Perrin	25.00
Forty-one head sold for \$1552.50, an average of a few cents less than \$38, the bred sows of Mr. Calhoun averaging over \$40, making it one of the very successful sales of the season.	

Dawley's Poland China Sow Sale.

At Osborne, Kansas on February 14, Mr. F. A. Dawley of Waldo, Kan., held the greatest sale of Poland-China sows that has been held in Kansas this year. As will be seen by our report, there were breeders present from wide-

ly scattered points and they were of the best. The sale included 44 head of sows and gilts which brought \$3,313 or an average of \$75.30 per head. Mr. Dawley is a young man only recently graduated from the Kansas Agricultural College, but he has made wonderful strides as a breeder. There is nothing in the Poland-China herd books that is too good for him to get. He does not hesitate to spend money when he is getting what he wants. We take pleasure in publishing the accompanying report somewhat in detail because of the quality of the offering and of the remarkable average made.

The sale is as follows:

Thomas & Swank, Waterville, Kansas.	
Mary Wilks by U. S. Chief Perfection	\$55.00
Artful by Corrector	97.50
On's Rosalie by On and On	147.50
Spring Maid by Second Tecumseh	65.00
Hadley's Victoria by Hadley's Tecumseh	54.00
A. C. Greer, Waldo, Kansas.	
First Choice by Woodbury	100.00
Stewart & Son, Portis, Kansas.	
Ophelia by Grand Chief	251.00
J. Walter Garvey, Thayer, Illinois.	
Shine E. I. by Perfection E. L.	200.00
Pet 4th by Corrector	200.00
Web Davidson, Glasco, Kansas.	
On's Rose by On and On	122.50
Little Porus by Perfection's Likeness	90.00
Howard Reed, Frankfort, Kansas.	
Oriole by Woodbury	75.00
W. A. Prewett, Asherville, Kansas.	
Hulda's Sister by Stylish Perfection	60.00
Leon Calhoun, Potter, Kans.	
Evangeline by Chief Perfection 2nd	86.00
Henry Shuler, Clifton, Kansas.	
D's Promise by D's Ideal Sunshine	50.00
Keep Me Too by Highroller	40.00
C. E. Toothacre, Hoxie, Kansas.	
Hadley's 2nd by Eclipse Model	42.50
W. T. Hammond, Portis, Kansas.	
Minnie H. by Hadley's Tecumseh	67.50
Honeyman & Milburn, Madison, Kansas.	
Keep On Daisy by Keep On	152.50
Coquette by Skybo	100.00
O. F. Olson, Brookville, Kansas.	
Woodbury Queen by Woodbury	67.50
Lady Sunlight by G's Perfection	66.00
Miss Quality by Highroller	57.00
Lee Cowger, Osborne, Kansas.	
Salvia by Chief Perfection 2nd	51.00
L. E. Deaver, Esbon, Kansas.	
Miss Parker by Parker	50.00
F. C. Herrick, Osborne, Kansas.	
Sister Sue by Spellbinder	100.00
A. J. Ward & Son, Belleville, Kansas.	
Pansy Blossom by Skybo	85.00
E. A. Kramer, Plainville, Kansas.	
Belle by Perfect Success	60.00
J. E. Hebrew, Stockton, Kansas.	
Winnie by Grand Chief	91.00
J. A. Goff, Simpson, Kansas.	
Springside by Faultless Over Chief	51.00
Grant Crawford, Lincoln, Kansas.	
Miss Topsey by Perfection's Profit	43.00
James Holmes, Densmore, Kansas.	
Lady Gwendoline by Perfection's Profit	43.00
Princess by Prince Henry	40.00
E. A. Wood, Lincoln, Kansas.	
Kansas Sunflower by Sunflower Perfection	50.00
Samantha by Perfection's Profit	35.00
Tom Collins, Barnard, Kansas.	
E. L.'s Beauty by Perfection E. L.	60.00
B. A. Phillips, Osborne, Kansas.	
Mayflower by G's Perfection	41.00
W. H. Sayles, Simpson, Kansas.	
Sweetheart by Woodbury	42.50
Monroe Dawley, Osborne, Kansas.	
Woodbury's Perfection by Woodbury	58.00
M. W. Adamson, Lincoln, Kansas.	
Little Mischief by Woodbury	42.00
E. E. Leak, Agra, Kansas.	
Magdalene by Choice Chief	30.00
S. T. Kindley, Downs, Kansas.	
Tecumseh J. C. Model by Kansas Chief	36.00
B. E. Bateman, Cawker City, Kansas.	
Lady Edith by Admiral Togo	26.00
One Boar pig by Nonpareil to E. E. Leak, Agra, Kansas, for	32.00
Total	\$3313.00

Strawn's Sale of Shorthorns.

L. R. Strawn's sale of Shorthorn cattle, which will be held March 1 at his farm near Half Mound, Kansas, offers exceptional opportunities for breeders of this famous breed of cattle to purchase some cows, bulls and heifers of royal blood. Don't fail to attend this sale. His farm can be reached by the L. K. & W. Ry., from points west of Holton, or by a short drive from Valley Falls. Send for his catalogue and arrange to attend the sale. Col. Lafe Burger, the well-known auctioneer at Wellington, Kans., will cry the sale. If you can not attend in person, select what you want from the catalogue and send in your bids to C. E. Shafer, fieldman for the KANSAS FARMER, and he will give them careful attention.

Ward Brothers' Great Sale of Durocs.

Ward Brothers, the well-known hogmen, will hold their annual sale of Durocs on Tuesday, March 6, at their farm three miles south of Republic, Kans. This offering is among the best which has been made this season, and includes ten registered sows which are bred to their great boars. Shakespeare 3d (17919), Model H (37957), Honest John (37333), and King John. These sows are from 3 to 4 years old and consist of Bright Beauty (93966), sired by King Marti; dam Dark Beauty (76120); W. H. Choice (95082), sired by Corrector A.; dam Athol Queen; Sunflower P (35228), sired by Ak-Sar-Ben 4th (9423 A); dam Souvenir 3d (23264); Improver's Queen (95084), by Improver 2d; Yellow Gal (86092), by Best of Topnotcher; Ward's Aledos 2d (58400), by Young Acme; and Miss Marti (95086), sired by Marti King. Also, Miss Idol (95086), by Hugh Idol, by Topnotcher; Miss Dial 3d (76122), sired by Young Thorn; June R 2d (93968), by Ak-Sar-Ben; also eighteen spring gilts and fall yearlings, some of the sows named and others out of their own breeding sows which

they will keep in their herd. These gilts are bred to Long Orion by Orion, and Honest John by Young John; also some of them to their great herd boar. Ward Brothers have been in the hog business for many years and have shipped their stuff all over Kansas, and they rank high among the Duroc breeders of the State. Their catalogue is now ready and free for the asking. Mention the KANSAS FARMER and send for one at once. Parties who are unable to attend this sale but desire some of this stock may send bids to C. E. Shaffer, the fieldman of the KANSAS FARMER, care of Ward Brothers, Republic, Kans., and they will receive careful attention.

Jones & Son's Sale.

Jones & Son's sale of Durocs at Concordia last Tuesday was very successful considering the difficulty under which it was held, the day being very stormy and cold, so that many buyers were unable to attend. The stuff averaged \$42.20 per head, which, considering the quality of the offering, was very low. Jones' stock is always in demand and with a fair day his average would easily have been \$75 per head. They will shortly remove their famous herd of Durocs from Delphos to Concordia, Kansas, where they have purchased a fine farm and will continue to raise pure-bred hogs.

The Lincoln Importing Horse Co.

Manager A. L. Sullivan of the Lincoln Importing Horse Co., of Lincoln, Neb., makes a change in his advertisement this week and states that business with the big horses is good. Buyers are visiting the \$10,000 barn almost daily and many sales have been made. With the large number of stallions now on hand Mr. Sullivan is able to give customers a wider range of choice than he could later in the season. He has issued a beautiful catalogue of these horses which may be had for the asking.

Gossip About Stock.

Philip Albrecht, proprietor of the West Beaver Valley Stock Farm, at Smith Center, Kans., has a herd of Durocs that is hard to beat. Mr. Albrecht is constantly adding to his herd from the best strains of blood in the country and is rapidly taking a place among the foremost breeders of the State.

It is not often that readers of the KANSAS FARMER have such an opportunity as that advertised by J. W. Babbitt, of Hiawatha, Kans., who offers a nice bunch of Shropshire sheep for sale. This sale will take place at the farm, 2½ miles east of Hiawatha, Kans., on Monday, February 26. The sheep offered are descended from the flocks of Geo. Allen and W. R. Weaver, the great Illinois breeders. Any one unable to attend this sale may send bids to Mr. Babbitt and be sure of fair treatment.

Mr. Henry Shuler, of Clifton, Kans., purchased two sows at the Frank Dawley sale, which was held at Osborne, Kans. They were Keep-Me-To by High Roller by Woodbury, dam Elsie Keep On by Keen On; and D's Promise by D's Ideal Sunshine by Ideal Sunshine, dam Delightful U. S. 67473. Keep-Me-To is bred to the great boar, Nonpareil, and D's Promise to Admiral Togo. Mr. Shuler is just starting in the pure-bred hog business and makes no mistake by starting his herd with Dawley's great strain of hogs.

At Hope, Kans., on March 6, Mr. Thos. Gribben will disperse his herd of Galloway cattle. This herd numbers 33 head, of which 23 are females ranging from 10 months to 8 years old. None of the bulls are older than 30 months. Among these cattle are some prize-winners. These are mentioned in the advertisement on page 207. This will be a fine opportunity to secure Galloways of choice breeding at your own price. In addition Mr. Gribben will sell about 40 head of high-grade Galloway cattle and 15 mules. It is not often that such a chance presents itself. Read the advertisement carefully and you will want to go.

Among the jacks and jennets that will be sold at Moran, Kans., Friday, March 9, by W. D. Gott, Xenia, Kans., will be Chief Bonbon 962; black jack coming 4 years old, 15½ hands high, standard measure; Black Eagle 944, coming 5 years old, 15½ hands high; Giant 943, 7 years old, 15½ hands high; King Joe 946, 1 year old, 15 hands high, and the jennets that are producing

Williams' Shaving Soap

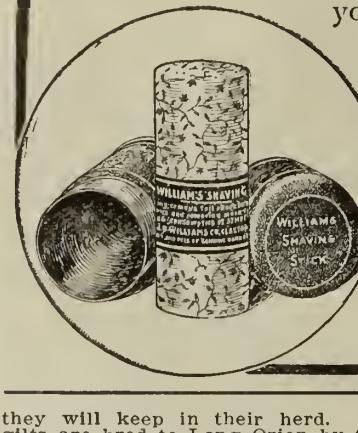
Suppose your dealer does make a few extra pennies by recommending an inferior shaving soap!

What good does that do you? It is your face that suffers—not the dealer. Insist upon Williams'.

Send 4c. in stamps for a Williams' Shaving Stick, (Trial Size.) (Enough for 50 shaves.)

Williams' Barbers' Bar, Yankee, Mug, Quick & Easy Shaving Soaps and Williams' Shaving Sticks.—Sold everywhere. Address,

THE J. B. WILLIAMS COMPANY,
Dept. A, Glastonbury, Conn.



they will keep in their herd. These gilts are bred to Long Orion by Orion, and Honest John by Young John; also some of them to their great herd boar. Ward Brothers have been in the hog business for many years and have shipped their stuff all over Kansas, and they rank high among the Duroc breeders of the State. Their catalogue is now ready and free for the asking. Mention the KANSAS FARMER and send for one at once. Parties who are unable to attend this sale but desire some of this stock may send bids to C. E. Shaffer, the fieldman of the KANSAS FARMER, care of Ward Brothers, Republic, Kans., and they will receive careful attention.

PUBLIC SALE 25 Shropshire Sheep



To be held at

Hiawatha, Kansas, Monday Feb. 26.

I will sell at public sale 2½ miles east of Hiawatha, 25 head of Shropshire sheep. These are fine individuals, descendant from flocks of S. M. Allen and W. R. Weaver, of Illinois. The sheep offered are full blood but not registered. For further particulars

J. W. Babbitt, Hiawatha, Kansas

I am well pleased with the Auto-Fedan, but sorry I did not get one sooner. J. J. Schneider, County Treasurer, Abilene, Kans.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1064 Jefferson St., Topeka, Kansas

Seed Oats

50c a bushel and up. The cheapest, heaviest, best yielding Oats are Ratekin's Reliable Grown, pure stock, Ratekin's New Sensation, Early Champion, White Russian and Texas Red Rust proof. Write for big catalogue, gives full descriptions of these oats, and all farm seeds, free. A postal will bring it. Address Ratekin's Seed House, Box 19, Shenandoah, Ia.

13 WEEKS FREE Or 15 months for only \$1

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1868, the best genuine agricultural weekly paper in the west. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

KANSAS FARMER COMPANY, Topeka, Kansas.

I accept your trial offer to new subscribers to send me the Kansas Farmer three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O. Address.....

THERE'S NO COMPANION LIKE
STEVEN'S
No boy was ever lonely
with a "Stevens" in his hands.
Our Free Catalogue
We issue a catalogue of 140 pages, telling all about the "Stevens" shotguns, rifles and pistols; all about cartridges, targets, sights, weights of rifles, sighting them, etc. It also tells how to pick out a rifle or a gun, and how to take care of them. Send two 2-cent stamps and we will mail it to you free.
If your dealer can't supply you with a "Stevens," write direct to us.
J. STEVENS ARMS & TOOL CO.
125 High Street
Chicopee Falls Mass.
U. S. A.

these jacks, some with splendid jack colts by side. Everything goes without a reserve bid, rain or shine. The very best of reference is given, and you will get a square deal. Write at once to W. D. Gott, Xenia, Kans., for catalogue, mentioning the KANSAS FARMER.

E. D. King, of Burlington, Kans., now has what is considered the largest Berkshire breeding establishment in the world. It is estimated that he will have about 1,200 pigs on his farm from the farrow of 1906. His herd boar is the best son of the great Lord Lee who in turn was the best son of the grand champion, Lord Premier 50001. His sows are of the finest breeding and are good individuals. They are beginning to farrow now and the litters are very large and fine. Mr. King makes a change in his advertising card this week to which we direct special attention. When you want Berkshires get good ones. When you want good Berkshires go where they are and take your pick of hundreds.

F. M. Gifford, the well-known Shorthorn breeder at Wakefield, Kans., will hold a sale of Shorthorns in the stock pavilion of the Kansas Agricultural College at Manhattan, on April 25. His offering will include 20 bulls and 20 heifers. These heifers are bred to his great herd bulls, Senator Bruce and Cordellias Knight. Mr. Gifford needs no introduction to the public. He is one of the oldest and best-known breeders in the West and his sales which have been held in the past at Denver, Colo., Chicago, Ill., and Manhattan, Kans., have attracted the well-known breeders of the country. His catalogue will be out in a few days and a postal card will bring it to you. Write him at once.

In this issue of the KANSAS FARMER appears an illustration of one of the prize-winning mares owned by F. H. Schreipel, Ellinwood, Kans., who reports as follows: "I have had a good fall trade, and prospects for 1906 are opening up in good shape. Inquiries were never better than at present. The farmer never had such great demand and such high prices for the high-class draft horse as at the present time, and every farmer in the State of Kansas should put forth an effort to get a few good brood mares and raise some of these high-priced horses, and he will find it more profitable than any other stock. And every farmer can raise good draft horses if he has good draft mares and breeds to a good pure-bred stallion. I have on hand fifty head of registered stallions, mares and colts, which are ready for sale at reasonable prices."

Gudgel & Simpson, of Independence, Mo., write: "With regard to our offering in the combination sale at Kansas City, Mo., February 28 and March 1, that will say that they are a representative lot of young things from our herd. The bulls are an extra choice lot, any of them fit for a herd-header. Lot 81, Prime Tex 229750, sired by our great show and breeding bull, Dandy Rex 71689, is in every way worthy of his sire. His dam, it will be observed, is a Beau Brummel cow. From this Lampighter-Beau Brummer cross we have produced best results in our present breeding operations. Lot 82, Monarchist 229749, is a son of Beau Dandy, a sire we are using with specially marked success as a getter of good bulls. His dam, Miss Catherine 76703, by Imp. Chesterfield 56697, is one of our best breeding cows and one that has several slow animals to her credit. Monarchist is unusually blocky, low to the ground, a great flesh-carrier and extra smooth. Lot 83, Gohlin 229748, is a dark-colored, thick-coated fellow, with ideal head and typical Anxiety-4th conformation. His sire is one of the best breeding sons of Beau Brummel we have in the herd. The dam, Gwendoline 7th 61561, is from one of our best families. Gohlin 229748 is good enough to head anybody's herd. The females in the offering are all young, with their entire period of usefulness before them. Two of them, Lots 79 and 80, are daughters of Dandy Rex 71689, and will be offered in calf to Beau Donovan 3d 186831, a good son of Beau Brummel. The other heifers will be held unbred. This sale will undoubtedly furnish an opportunity to secure these good heifers at a figure below their actual worth, from the fact that they will be presented in only fair breeding condition, not having been specially fitted for this sale, yet we will warrant them to be all good individuals, and if carrying more flesh, would, without doubt, bring more money."

The offer of sows to be made by J. R. Young, of Richards, Mo., for his On and On sale on March 7, 1906, is one of the greatest ever gotten together from the standpoint of individual merit as well as breeding. There will be included about 15 head sired by Chief Perfection 2d. Among them is Orange Blossom, one of the \$1,645 litter in which were the \$850 pig, Mastleator; Hulda's Dream out of the \$525 Hulda's Keep On; Amelia Perfection out of Queen Vlew Queen, a \$450 sow; Chieftess another of like breeding and merit. The great sow sire, Perfection E. L., is represented by ten in the sale. Lucille, a daughter of the grand champion, Lucille, of the World's Fair; Fancy E. L. and E. L. Fancy, out of I Am by G's Perfection; Martha E. L. out of a daughter of Margaret, the Iowa State Fair champion. Then there are others such as Lady Foster by Foster's Chief Perfection; Missouri Lady, and three other daughters of Missouri Black Perfection. Two more of the good, mellow Perfection E. L. litter are out of the great Flossie Favorite. This litter was a large one and contained 11 pigs all great ones, namely Tony and a sister of his by Chief Sunshine 2d and two of his half-sisters by old Chief Sunshine; Thickset Girl by Thickset; Hunter's Lady Louise, a full sister to Ed Kleaver's great hoar, Provider that won first prize at the Ohio State Fair last year. Throughout the entire list will be found the same great breeding, size, style and finish that will please the most exacting. The size of the spring gilts of this offering would surprise those who

are breeding the present popular type, because of their wonderful quality and growthiness. Every breeder of the Poland-China will want the catalogue of this sale, and ought to arrange to attend whether he desires to purchase or not. To see On and On is alone worth the trip to Richards, Mo. It is rare that sweepstakes boar will show the true form and mellow ness exhibited by On and On 18 months after his honors were won. His great size, good bone, style and finish with his wonderful smoothness can not fail to please. All who have seen his get recognize the type and easy feeding qualities. A breeder contemplating a sale in the near future could not make it more attractive than by securing an On and On litter. This sale will afford an opportunity to get ready for your sale. If you can not be present at the sale on March 7, send your bid to one of the auctioneers, or to John D. Snyder, KANSAS FARMER representative, and he will handle it to your interest.

The Johnson County Jack Farm, owned by G. A. Fewel, Leeton, Mo., advertised on page 173, is one of the largest pack farms now in existence. It was established in 1850 as a mule farm, and in 1890 was added the choicest lot of breeding stock of Black Mammoth and Caladonian jacks, and Wilkes, Mambrino, and Patchen trotting horses, etc. Mr. Fewel claims to have sold more first-class jacks and jennets in the last ten years than any other farm in the world. They have gone into almost every State in the Union and some have crossed the big waters. They have been shown at many of the leading county and State fairs, and they proved by their winnings to be as good as the best. This present offering is the best ever made, and includes several that were never defeated in a show-ring. Among them is "Fewel's Taxpayer," that defeated the World's Fair jack, Silver Tips, for the best jack any age. During all this time he has never had any litigation or friction over any of his dealings, and has had only one jack returned. He gives as reference the bank of Leeton or either bank of Windsor or Calhoun, or any man or firm in Johnson or Henry Counties, Missouri.

Prospective buyers can feel assured that they will find what they want and get it at a bargain, and always be treated right and square at the Johnson County Jack Farm. If they will write him or wire G. A. Fewel when they arrive in Leeton, he will be glad to meet them at the depot, and save them further expense.

The section of the Herefords, selling in the combination sale at Kansas City, Mo., February 28 and March 1, that will attract as much attention as any other, will be the one consigned by Steele Bros., of Richland, Kans. This consignment will include 10 head, 6 cows and heifers and 4 bulls, principally the get of Princeps 66683, the sire of the \$1,750 Princeps 4th, the \$550 Princeps 12th, and most of the other show cattle that have gone out from Belvoir for the past few years. The bulls in this offering are all mellow, sappy, thick-meated fellows, the kind the "talent" call "good handlers." One of these, No. 68 in the catalogue, was in the show herd last year, showing as a junior calf. At the Nebraska State Fair he was first in class, and at Topeka, showing against seniors, he was awarded second place. He was got by a son of Princeps, and out of Rosalind, a line-bred Anxiety 4th cow. Every one of these bulls is a prospective herd-header, and will bear the closest inspection. The star attractions of this consignment, however, are the cows. Principal among these is the matronly looking show cow, Princess May 2d by Princeps. She was first prize and sweepstakes cow at Nebraska State Fair last year. This cow is not only matronly looking, but is a proven producer. She is 4 years old, has dropped two calves, and is safely settled to the service of Beau Gondolus. This is probably as valuable a cow as any that have gone through the sale ring at Kansas City. Her first calf, a heifer, one of last year's show herd, winner of first prize in junior yearling heifer class at Lincoln, is included in this sale. She is a beautiful, thick-fleshed, broody looking heifer, and will be one of the eagerly sought attractions of the sale. Princess May 2d's last calf is a bull, and is one of the best of this year's crop. This crop will doubtless have many admirers at the ring side, and the man who buys her will be conscious of the fact that he is adding to his herd one of the gems of the breed. Steele Bros' herd is not large—about 125 all told—but it is one of the very best in this country, and their stock is developed in such a manner as to retain their usefulness to an advanced age; the bulls siring and the cows producing calves regularly up to 12 and 14 years of age. There will be 100 head of useful cattle sold in these sales. The event is under the management of C. R. Thomas, secretary of the American Hereford Cattle-Breeders' Association, and catalogues may be had by addressing him at Kansas City, Mo.

L. M. Monsees & Sons, Smithton, Mo., will hold their annual jack and jennet sale at Limestone Valley Farm, 6 miles east of Sedalia and 2 miles north of Smithton, Mo., on March 6, 1906. To those who have seen the stock on this farm or have read an account of the World's Fair record of the firm, or even read the reports of the former sales of the firm, no introduction or explanation of the quality and desirability of this offering is necessary. But to the contemplating purchaser of jack and jennet stock, we wish to say that a like offering has never been placed at public appraisal before unless it was one of the former offerings from this farm. They are of the same breeding and merit as the herd shown at the St. Louis World's Fair that won 70 of the best prizes and many more than all other exhibitors combined; and they have been reared and developed in the best possible way to be perfect animals and are backed by the firm's guarantee which is as good as a Government bond, which considerations make it the opportunity of the year to secure such stock. In all, about 60 head will be sold. Twenty-seven jacks ready for

STANDARD STOCK FOOD

It Makes Stock Thrive.

Because it flavors the entire ration, stimulates the flow of digestive juices, makes digestion easier and more thorough. It makes the feed you feed go farther.

A pound of it contains more feeds than a pound of any other. It is stronger, purer, contains more valuable ingredients; it looks better, smells better, tastes better and is better. It lasts longer, goes farther and does more good. Compare it with others and see for yourself.

Never Had Cattle So Better.

Orient, Ia., April 9, 1902.
Three years ago I bought and fed 500 pounds of Standard Food. I then tried 500 pounds of each of other stock foods and have gone back to the Standard again and intend to stay there. I would rather get the Standard and pay for it than feed the other foods at any price.

Ask Your Dealer. If he will not supply you, send us his name, tell us how much stock you keep and we will send you free our 50c live stock book, 160 pages. Write to day. Address
STANDARD STOCK FOOD CO.,
1617 Howard St., Omaha, Neb.

Dempster
Mill Mfg.
Co.

Manufacturers
of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

"Dempster Gasoline Engines 2 to 30
H. P.—2 and 4 cycle Horizontal or Vertical—for any duty."

Western Made
and
Well Made

Factory, BEATRICE, NEB.

Branches:—Kansas City, Mo., Omaha,
Neb., Sioux Falls, South Dakota.



The "**QUEEN**" is not an incubator
but the Incubator.

**THE HIGHEST GRADE INCUBATOR
EVER OFFERED TO THE PUBLIC**

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the **QUEEN**. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

Great American Desert Seeds
are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. Blackman, Grower and Dealer, Hoxie, Kans.

use are catalogued and a better lot was never seen by the writer. They are the kind that sire the \$200 mules that buyers are hunting the country over for. A bunch of mules on feed at Limestone Valley Farm, sired by the jacks on the farm, are expected to sell at \$225 per head, \$210 having already been bid for them in only fair flesh. Besides the jacks catalogued there are about 25 jennets some with colts at side and others bred to the grand champion World's Fair jack, Orphan Boy, or to Limestone Mammoth, two of the greatest breeding jacks, one being the greatest show jack in the history of the business. He has been successfully shown for ten years and was never defeated, and the World's Fair herd nearly all carried his blood either through dam or sire. These jennets are the dams and sisters in great part to the great jacks the farm has been producing, and are of the sturdiest and most robust stock in the country. They are the result of the best breeding and are backed by the firm's guarantee which is as good as a Government bond, which considerations make it the opportunity of the year to secure such stock. In all, about 60 head will be sold. Twenty-seven jacks ready for

one day of the year this privilege is granted the public by this, the greatest jack breeding firm in the United States, or possibly more correctly speaking, in the world.

Hunter-Trader-Trapper.

To the lover of out-door life the Hunter-Trader-Trapper magazine will bring a deal of satisfaction. It is a large, finely illustrated magazine devoted to those things which are of special interest to the hunter and trapper and the fur trade. It teaches all the tricks of trapping and many a young man has been able to find enjoyment and, at the same time, make good money by trapping skunks, muskrats, mink, etc., in localities where they were previously supposed not to exist, or at least, to be very scarce. The magazine gives the prices of all kinds of furs and pelts and tells how to catch them. It is full of interest and valuable receipts for making snares, setting traps, etc. This magazine costs \$1.00 per year but we have made arrangements so that any one can get the Hunter-Trader-Trapper and the KANSAS FARMER, each for one year for only \$1.50 for both. Send in your orders at once. You will like it.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed. News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master.....Aaron Jones, South Bend, Ind.
Lecturer.....N. J. Bachelder, Concord, N. H.
Secretary.....C. M. Freeman, Tipton, Ohio

KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan
Overseer.....A. P. Reardon, McLouth
Lecturer.....Ole Ilbmer, Olathe
Stewart.....R. C. Post, Spring Hill
Assistant Stewart.....Frank Wizwell Ochiltree
Chaplain.....Mrs. M. J. Ramage, Arkansas City
Treasurer.....Wm. Henry, Olathe
Secretary.....George Black, Olathe
Gatekeeper.....G. F. Kyner, Newton
Ceres.....Mrs. M. L. Allison, Lyndon
Pomona.....Mrs. S. M. Phinney, McLouth
Flora.....Mrs. S. J. Lovett, Larned
L. A. S.....Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

Henry Rhoades, Chairman.....Gardner E. W. Westgate.....Manhattan
George Black, Secretary.....Olathe
J. T. Lincoln.....Madison
O. F. Whitney.....Topeka, Station A

STATE ORGANIZER.

W. B. Obrylu.....Overbrook

Insurance.

At the recent meeting of the Kansas State Grange, held at Madison, Kansas the matter of life insurance was taken up and referred to a special committee, whose duty it is to prepare a detailed system, and submit the same to the subordinate granges for consideration and report each to the lecturer of the State Grange as soon as possible. We also note that at the Delaware State Grange a committee was appointed to plan the organization of an American Life Insurance company, to be managed solely by the grangers and report at the next session. We also note that in New Hampshire the Grange Mutual Fire Insurance Company still continues to give to the patron's a safe insurance at the lowest possible cost. The company carries risks to the amount of \$7,000,000 on the best farm property and has saved to the members many thousands of dollars during its seventeen years of existence. We also note from the same source that the Grange Life Insurance Association does not seem to receive that encouragement and patronage which it deserves if it proves successful. The old members for the most part are staying with the company and paying the assessments promptly, but more of those who desire life insurance of a safe and honest kind should join the association.

The Grange Bulletin says, "When the proposition to start Grange Fire Insurance Companies was made, the question was, 'Can it be done?' Many said 'No.' Many others were doubtful, a few said, 'Yes.' The regular fire insurance company managers smiled in derision. The few believers went ahead and tried it. The result is a success. The grange insurance on farm property is the best in the country, cheap, safe, reliable, and satisfactory. Now, why can not farmers insure each other's lives? The same direct business methods that make fire insurance the best and cheapest known, would operate to make life insurance just as good and relatively as cheap." The National Grange recommends that the State Granges work out each its own system of life insurance. Some of the State Granges have appointed committees for that purpose, and Kansas is one of them.

Grange the Hope of the Nation.

"One of the hopeful things for the future of the Nation is the great organization which the farmers of the country are centralizing around the Grange. Within recent years there has been a marvelous growth that has extended to nearly every State and territory in the country, so that when it recently held its National Convention the attention of the whole country was attracted to its actions. It has taken hold of all of the vital questions before the country, and the discussion and action that will be brought to bear upon them are going to exert a mighty influence.—Amesbury (Mass.) News."

At the Massachusetts State Grange, Ex-Governor Bachelder said his policy as "Master of the National Grange will be determined wholly by the policy of the Grange, but that he expects to put forth the greater part of his efforts in the great agricultural States of the Central West, with particular attention to Wisconsin, Minnesota, Iowa, Missouri and Kentucky.

"In these States, Governor Bachelder said, the Grange movement has been slow to grow and the intention is to make it powerful where the farmers

form so large a percentage of the population as they do in the States named. In this connection he pointed out that the Grange is stronger in New England than anywhere else. There are 1,000 subordinate Granges in this group of States, with about 100,000 members."

The Grange stands to-day as the acknowledged leader of the sane, thinking farmers of the country, and each succeeding year more and more demonstrates its right to leadership. The farmers of Kansas have almost recognized the necessity of farmer organizations, but have been very much divided as to choice. But since the Grange is the only one that has stood the test of time, the farmers of Kansas are beginning to realize that the Grange is the leader, which is known by the many letters of inquiry as to the ways and means for becoming members of the great farmers' organization.

What Benefit Is the Grange to the Farmer?

Geo. Black, Secretary of Kansas State Grange, Before the Farmers' Institute at Wellsville, Feb. 9, 1906.

Nothing has stimulated inquiry, nor done more for the education of the human race, than those two little words "what" and "why."

All down the ages, from the time that King David asked the question "What is man that Thou art mindful of him?" until this hour when humanity is everywhere asking, "What are the rights of man?" the words "what" and "why" have awakened every latent energy in statesman and philosopher, in prelate and layman, in all classes and all people; for man loves to be able to give a reason for the faith that is in him and feels that he is untrue to himself and unworthy of the confidence of his fellow man, if he is unable to do this.

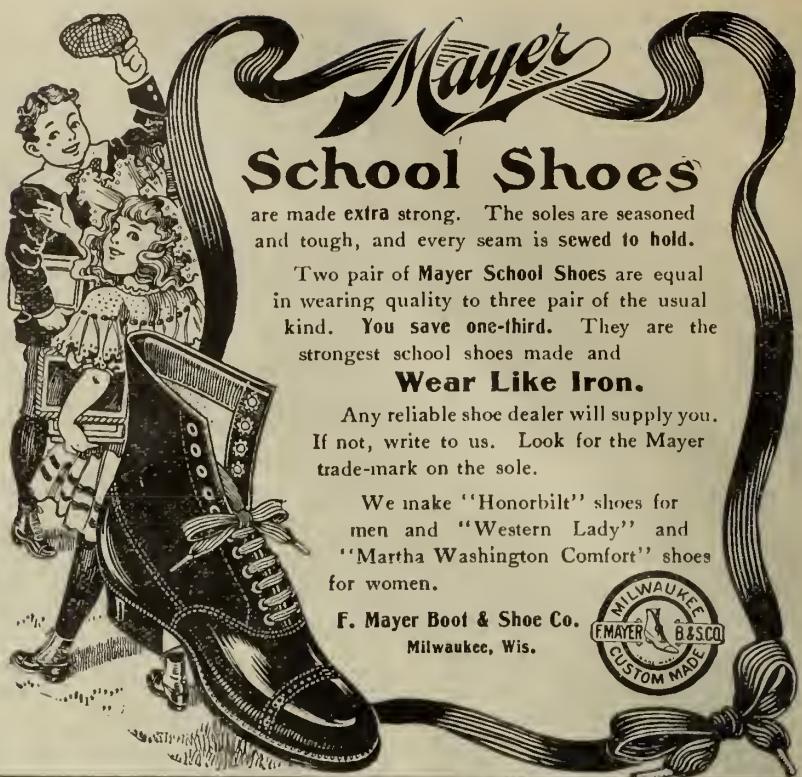
The logic of a Gamaliel never has stifled human reason nor checked human inquiry. It may have saved the life of the Apostle Peter, for Peter was preaching a new doctrine and declared that it was heaven-born and heaven-sent; and Gamaliel decided that it was not a matter of human reason and therefore cried out, "Let them alone, for if this work be of man it will come to naught, but if it be of God ye can not overturn it." Yet you would feel that I was evading the question if I should reply to your inquiry as did Gamaliel to the Jewish rabble.

IT WAS NEEDED.

The Grange is but another offspring of the many good institutions that have been born to us through the throes of civil liberty, for it had to bide its time and wait until the world was ready to receive it. It could not have lived a moment in the Roman or Grecian age, nor under any of the absolute monarchies of the old world; nor would the age of Knight-errantry or Feudalism have tolerated a secret order among the peasantry of their time. The submissive, cringing, enslaved tiller of the soil, never once during all those ages even dreamed of a right to organize for mutual improvement. The pioneers of human rights must first fight to the bitter end that long battle of the centuries, and pave the way for freedom of thought and liberty of speech. They paid the price in the dungeon and on the rack and at the stake; and the magnitude of their sufferings and their heroism fairly staggers the historian until he feels more like kneeling at their shrine than writing of their deeds. But God bless their saintly souls; we are reaping where they have sowed and are garnering a full harvest.

So I again declare that the Grange was born in due season, was born of the essential wants and needs of the farmer; and the fundamental principles upon which it was based will not only bless the agricultural class but in blessing them it will also bless all social conditions within reach of its sphere of influence.

Its founders said: "We need an order wherein we can educate ourselves along every line of social, moral, mental, and even physical development. We need an order where the practical knowledge of each member may become the common property of all. We need an order where we can cultivate our social qualities and bring them up to the highest possible standard. We need an order where we can reason together on the best possible modes of cultivating the soil and crops, of harvesting them, and of buying and selling; where we can teach temperance and insist upon economy and practice brotherly love; where we can cooperate to protect ourselves against the greed of capital and the power of corporations; and where we can decide



Mayer School Shoes

are made extra strong. The soles are seasoned and tough, and every seam is sewed to hold.

Two pair of Mayer School Shoes are equal in wearing quality to three pair of the usual kind. You save one-third. They are the strongest school shoes made and

Wear Like Iron.

Any reliable shoe dealer will supply you. If not, write to us. Look for the Mayer trade-mark on the sole.

We make "Honorbilt" shoes for men and "Western Lady" and "Martha Washington Comfort" shoes for women.

F. Mayer Boot & Shoe Co.
Milwaukee, Wis.



Let Me Quote You a Price on a First-Class Fanning Mill

How many dollars could you save if you owned a genuine Chatham Fanning Mill?

Think for a moment what it will do.

It will grade grain so you can get a fancy price for the best.

It will take weed seed, chaff and withered kernels out of seed grain.

It will separate one kind of grain from another.

It will remove oats from wheat.

It will clean Corn, Rye, Barley, Wheat, Oats, Timothy, Clover, Millet, Flax, Rice, Peas, Beans, Kaffir Corn, Potatoes, Broom Corn, Alfalfa, Grass Seed, Cotton Seed, Alsike, Blue Grass, Red Top, Buckwheat, Hungarian, Orchard Grass, Rape, Rye Grass and everything of this kind.

And in any one of these processes a Chatham Fanning Mill will save its entire cost in short order.

For the fanning makes every bushel of grain you raise worth more money.

You don't sow weeds if you use a Chatham Fanning Mill.

You don't get "second price" for grain if it has been fanned.

And to prove our claims to you—to convince you that Chatham Fanning Mills are the best made and will do what we say—we are willing to let you try one 30 days **FREE**, if you wish.

Send today for our liberal proposition. It will surprise and please you.

For we sell direct to you and ship from one of our 20 big branch warehouses in leading cities. This means prompt shipments and quick deliveries.

And you get a Fanning Mill made by a factory that makes a specialty of high-grade mills.

You buy at a bargain price.

For we make our own mills in one of the biggest factories in the world.

Our ample capital enables us to buy supplies in immense quantities at low prices.

We turn out hundreds of Fanning Mills. Our workmen are skilled. They have had long experience. They know just what to use and how to use it.

Consequently we are able to give you bigger value for your money than you can get anywhere else.

The Chatham Name Stands for Quality.

And you can get no such Fanning Mills as ours from ordinary mail order or catalog houses.

You cannot buy mills as good from dealers or at general stores.

Over 200,000 Chatham Mills are in use. We have made them for sixty years. Today they are better than ever—absolutely modern and up-to-date.

Users everywhere will tell you our mills are the best.

But send at once for the rest of the story and our liberal selling terms.

Ask for our little book "How to Make Dollars Out of Wind." It tells how a Chatham Fanning Mill will put dollars in your pocket.

A post-card with your name and address, mailed today, gets it.

The Manson Campbell Co. (Limited)

Makers of Chatham Fanning Mills, Incubators and Brooders

319 Wesson Avenue, DETROIT, MICH.



WONDERFUL FREE OFFER

\$7.82 buys this, the Highest Grade Steel Stubble Plow blade. \$1.69 and upwards for other High Grade Working Plows. \$24.80 buys the Best High Lift, Foot Lift and Trip Sulky Plow blade. \$39.80 buys the Best High Lift, Foot Lift and Trip Gang Plow blade. 12, 14 and 16-inch Sulky and

Gang Plows at \$24.80 to \$39.95, that combine every high grade feature known. Guaranteed the strongest, most durable, lightest draft and best working plows made. WE MAKE A WONDERFULLY LIBERAL FREE OFFER ON THESE PLOWS. \$29.35 buys the best Disc Riding Plow made. You will wonder at our FREE OFFER. Send this advertisement out and send to us, or on a postal card or in a letter to us say: "Send me your Free Plow Offers," and you will receive free, by return mail, postpaid, all our wonderful offers, our free trial proposition, pay after received plan, guarantees; you will get our very latest and most wonderful offer; we will send you our latest new 1906 Agricultural Implement Catalogue, with pictures, full descriptions, astonishingly low prices and wonderful offers on every kind of high grade plow; also pictures, descriptions, prices and all our wonderful offers on everything in Harrows, Disc-Harrows, Planers, Cultivators, Scythes, Hayng Tools, Grinding Mills, Corn Shellers, Horse Powers, Saw Firms, Cider Mills, Bee Hives, Steam Pullers, Wind Mills, Gasoline Engines, Steam Engines and Boilers, Incubators, Brooders, Hay Presses, everything for farmers. BEST GOODS TRADE. ONE-HALF THE PRICE CHARGED BY OTHERS. WONDERFUL FREE OFFERS. WRITE US AND GET OUR GREAT BOOK AND WONDERFUL OFFERS FREE. If you buy plows or other goods from us, we will send you a handsome top buggy FREE. This great, FREE BUGGY OFFER will go to you and be fully explained if you will cut this advertisement out and send to us, or on a postal card or in a letter to us say: "Send me your FREE PLOW OFFERS." WRITE TODAY, SURE. ADDRESS,

SEARS, ROEBUCK & CO., Chicago, Ill.

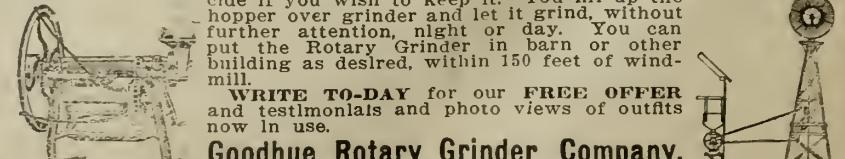
Get This Windmill Grinder Free

Then your Pumping Windmill will do your Feed Grinding and run One-Hole Sheller and Churn or Grindstone. We don't give it away, but we ship it to any reliable farmer to use, and after the grinder pays for itself, then you pay us. If it don't work you ship it back without paying anything. You Take No Risk.

Especially recommended for use with 8-ft Back Geared Star, Goodhue, Samson, Ideal, Fairbanks, Dandy, Dempster, Duplex, Red Cross, Capital and 10-ft. Halladay wood mills. Any good windmill that makes 35 to 50 strokes per minute is sure to run it good. It pays for itself by the time you are to pay us and really costs you nothing. You have Thirty Days' Trial to decide if you wish to keep it. You fill up the hopper over grinder and let it grind, without further attention, night or day. You can put the Rotary Grinder in barn or other building as desired, within 150 feet of windmill.

WRITE TO-DAY for our FREE OFFER and testimonials and photo views of outfits now in use.

Goodhue Rotary Grinder Company,
ST CHARLES, ILLINOIS



upon the laws that are just to us and the laws that discriminate against our interests." It was also thought best, that as far as was possible, to serve our best interest, we buy and sell together and cooperate for our mutual good.

These were the reasons given to show the needs of an organization, and these are the fundamental principles and declared purposes upon which the order, known as the Patrons of Husbandry, rests to-day. And it would be hard to make me believe that a single soul in all this universe, who is honest of heart and clear of head, who would find fault with a single item of these principles or with us for organizing upon them.

It is true we have made mistakes, for back in the seventies our young and untrained order ran away with us and broke over the trees and attempted to plunge into the political arena and reform the laws, until they well-nigh wrecked our entire order in this State. But a remnant of the true and faithful held fast to our first principles; and when the storm was over they commenced rebuilding on the old and tried foundation; and now, for a quarter of a century, we have held to the "even tenor of our way," have faithfully clung to the precepts of our order, have kept all partisan politics out of the Grange and have enjoyed a wonderful growth in members and lodges all over our State.

We have tried to be careful not to infringe upon the rights of either individuals or corporations. We have advanced our own interests without detriment to any other person or party; we have increased our own happiness without deducting one iota from the rightful enjoyment of any other living being.

IT IS AN EDUCATOR.

We at least feel sure that the education we have received in our assembly halls has made us better citizens, with broader views and nobler purposes in life; we believe that the discussions of farm questions in our meetings have greatly improved our farming methods in the selecting of tools and machinery, in preparing the soil and planting our crops and in harvesting and marketing them, and in beautifying our homes and making them more attractive. We believe that through the influence of our order we love our homes and our calling more than ever before and that our boys are better satisfied and more willing to stay on the farm.

COOPERATION.

We know that while cooperative business ventures are not among the fundamental principles of the Grange, yet, as an incidental matter to our order, we have made extensive use of such in Kansas in insurance and in cooperative merchandising, and this fact has brought us in conflict, in a business way, with those who follow like callings, and possibly engendered some prejudices and dislikes, just to the extent that we have absorbed trade and commissions that otherwise they would have enjoyed. But should we be blamed for this? Have we not the same right as any other person, class, or people to enter into any legitimate business? And, if the Johnson County Cooperative Association pays back every year to their eight or nine hundred stockholders \$12,000 to \$15,000 in profits that otherwise would have enriched three or four merchants, is it not doing the greatest good to the greatest number, and should you not rather commend us than to condemn us for this? And if our Grange Insurance Company, that is now carrying \$4,000,000 in farm risks, and is caring for the best interests of its patrons at less than half of what it would cost them in old-line companies, and is paying every loss fairly and promptly and keeping this excess of profit at home, in the pockets of our people, to spend it with our own merchants and upon the industries of our own community, rather than to let it go to enrich the East—are we not doing a good deed or would you condemn us for this? If we are wrong, put your finger on the error and help us get right, but if we are right, encourage and commend us for we want to be right and we want to do good.

ITS AIM.

The one great aim of our order today is, that through the forum of the Grange, we may become as cultured and as well-informed on all the interesting topics of the hour, and that our judgment and opinions may deserve as much consideration and weight as any other class or calling, so that the merchant, the tradesman, and the professional classes, will commingle and harmonize with us on a common, fraternal,



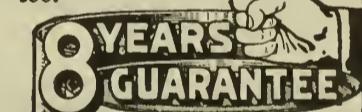
O.K. Chase
St. Louis, Mo.

I Am the Paint Man

2 Full Gallons Free to Try—6 Months Time to Pay

You Pay No Freight to Try My Paint.

Back of my paint stands my Eight Year, officially signed iron-clad Guarantee.



This is the longest and most liberal guarantee ever put on a paint.

For further particulars regarding my plan of selling, and complete color card of all colors, send a postal to O. L. Chase, St. Louis, Mo.

I will send my paint book—the most complete book of its kind ever published—absolutely free. Also my instruction book entitled "This Little Book Tells How to Paint" and copy of my 8 year guarantee.

O.K. Chase The Paint Man.

703 K Olive Street,

St. Louis, Mo.

NOTE—My 8 Year Guarantee backed by \$50,000 Bond

Social

plane, that the middle wall of partition in human society, may be rent asunder and broken down forever. We long for the day when we can feel assured that we are making a far brighter history than that which inspired the poem of "The man with the hoe," or moved the pen to write the story of the "Peasant life of past ages."

We are not the sons of Ham. And if we were the mudsills of society for untold centuries, the fault was not in us, but rather in that accursed element of the human race that has ever played the part of the shark to the fish of the sea and of the vulture to the fowls of the air.

We are dreaming of an age of better things for us and trying to work out our own salvation and to redeem agriculture from the slurs and slimes of past ages and bring the farm and the farmer back, nearer to that first and beautiful pattern that was given to us by the Holy One in Eden's ancient garden.

Will you help us? Will you lend us a hand? We have chosen the Grange as our shield and our battle-axe to

carve our way onward and upward to that higher plane, and we have taken the name of "Brother" and "Sister" that we might sustain equality and inspire a common interest in this effort to improve our condition. We are determined that agriculture shall never take another backward step, but shall go forward, until the man who holds the plow and the man who guides the State will stand together as brothers, equally worthy of the love and esteem of all the good people of the twentieth century.

Send for Free Sample.

Our renderers should not fail to include Congo Roofing in their list when they are sending out inquiries regarding ready roofings.

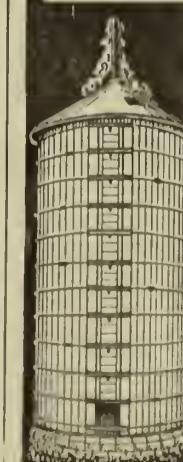
This roofing comes in four weights adapted for every kind of surface and for every size of pocketbook.

The manufacturers will send a booklet giving complete information about the roofing, together with a set of samples, in response to a postal card.

Address the Buchanan-Foster Company, 724 Drexel Building, Philadelphia, Pa.

All kinds of stock relish a change and variety of feed.

**THIS SILO
\$92⁴⁰**



Every stock and dairy farmer needs a silo. Our silos are made by expert silo builders, with extraordinary care, from best of materials, and will keep silage in good shape for feeding—in fact, there is no better silo made at any price. Made in sizes to suit. We save the farmer two profits and give him best silo built.

We also have a plan in sell this silo, and all kinds of merchandise, in the form of books, pamphlets, and other publications—and save them from \$150 to \$200 a year. Write for full particulars about it.

Write for special silo ent. Don't buy until you get it. CO-OPERATIVE SOCIETY OF THE NATIONAL SUPPLY CO., LANSING, MICHIGAN; CHICAGO, ILL.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas.

Home Departments

CONDUCTED BY RUTH COWGILL.

Farewell to the Town.
Farewell, ye busy haunts of men,
Ye garish sights of town,
Your motley crowds and grimy streets
A weariness have grown;
To other scenes my fancy strays,
O haste, impatient feet,
And let me see the summer flowers
That bloom in meadows sweet.

Those storied heights of brick and stone,
Which gaze with solemn stare
Upon each other day and night
Across the thoroughfare
Repel me with their frowning face;
I long to stroll at ease,
Through country lanes with hedgerows bound
And avenue with trees.

The busy hum of whirling wheels—
The clatter of the forge—
Those rolling clouds of smoke and steam
Which city works disgorge,
Will never reach my quiet home
As through the shining hours
I listen to the humming bee
Among the clover flowers.

The music of the city's roar
We face for Mammon's sake;
But let me hear the singing birds
That warble in the brake—
The cuckoo's note from distant haunts,
The blackbird piping loud,
And o'er the waving mowing grass
The skylark in the cloud.

Then come away from Mammon Town,
There's wealth in other hives,
And sweep the cobwebs from your brain,
The canker from your lives;
The odors of the city streets
Are charged with mystery,
Come, let us smell the fragrant mold
Along the fallow-lea.

We toss the weary books aside,
And raise the aching neck,
From cash and ledger's figured page,
To clutch the friendly check;
Good-by, proud city, thou hast proved
No friend to me or mine;
And if I see thy face no more,
My heart will not repine.

—J. T. B.

Educated Motherhood.

FLORENCE SHAW KELLOGG.

PART I.

"His father, so they say,
Was famous in his day;
What did his mother do?
His father helped to stump the State
For Grant in eighteen sixty-eight—
What did his mother do?
She merely watched him day and night,
She merely kept him headed right,
And went on praying that he might
Some day be brave and good and great—
That's all his mother did.

"His father, it is said,
Possessed a level head;
What did his mother have?
His father was no common clod,
Intended but to tote a hod.
What was his mother, though?
Oh, she was merely one who taught
Her son that vices must be fought,
That sin is in each evil thought,
That virtue paves the way to God—
That's all his mother was."

PART II.

The subject of educated motherhood is so vital and deep, so many-sided, that no one can do it justice in a short paper, and I can, at best, but hint briefly of the many things that might be said here, and leave you to work out each your own salvation, as a mother, find your own riches and draw your own conclusions. The little poem I have quoted gives a bright, sarcastic contrast between the father's and the mother's work, as it sometimes is in theory, but as a fact we know that if the work be intelligently and rightly done, there can be no sharp line drawn between the father's and the mother's part. We know that though he must go out into the world while she remains more in "the sweet, safe corner of the household fire," though he fights while she prays, yet in deeper truth they stand side by side in the home life and the work they do there for their children, he, as well as she, working and praying to keep them "headed right" and to make them "brave and good and great," in true worth and morality whether or not they be great as the world reckons greatness.

But as it is the mother of whom you wish me to speak, we will presuppose all this, and though I say "mother," you will none of you be unmindful of the fact that in love for and interest in their children, the twain are one; and the necessity for educated fathers—for fathers who are earnest and pure, as well as strong and determined, for fathers whom the mothers hold up as examples for their children, and in whose footsteps they will gladly see them walking—this is just as imperative as for mothers, and they should work together in perfect love and harmony always.

THE MOTHER'S WORK IS ETERNAL.
Ruskin says, "Good women are wash-

erwomen, working to make the world clean and pure." The mother should indeed be a "washerwoman" of this kind, and should strive first of all to make her home clean and pure, her children brave, true, and loyal in body, mind, and soul, after which she may give her surplus time and strength, if such there be, to the purifying and upbuilding of the life about her. She, most of all, should feel the eternalness of her work, its unending duration and importance, for this will help her, as nothing else can, to keep her spirit above the petty cares and vexations that come in the ceaseless round of daily work with its constant repetitions, and will lift it out of the rut of drudgery and set it in its true place with the great work of the world. Let her realize that her life is a part of the great creative life, and her work extends to the eternal verities—a part of all that is good and true and beautiful—joined to the work of God and the holy angels, and how can she grow weary or disheartened?

HIGHER EDUCATION.

There is much said and written both for and against the higher education of woman; and fear is expressed lest, if this be granted, it will lessen the desire for marriage and motherhood. But is not this desire too deeply impressed upon the heart of woman to be thus easily disturbed. The love of home and children is a part of the deepest life of every true woman—placed there by God Himself, who is the first great Parent. From God, too, comes the reason—the intellect that enables her to acquire an education. Surely he has not given her this ability to have it lie unused—undeveloped. Does it not follow as a logical sequence that a mother can do her work better if her character be full, well-rounded, her mind trained and educated? How much of this especial education for motherhood may come from books, is an open question, but it seems to me nothing that helps her as a woman—nothing that adds to the riches of her heart and mind, and makes her stronger and more influential, can hurt her, or lessen her good work as a mother. Dickens says, "How much may depend on the education of daughters and the conduct of mothers, how much of the brightest part of our National character may be perpetuated by their wisdom or frittered away by their folly? how much of it may have been lost already? and how much more is in danger of vanishing every day?" are questions deserving of a little serious consideration from all young couples, nevertheless."

The mother should keep a broad view. She, least of all, can afford to be petty in her thoughts of life, but should have a largeness of soul, a clearness of vision that will enable her to keep things in their true proportion and place. She should know the relative importance of each phase of her work and not place undue stress on the outer or material, to the neglect or impoverishment of the more enduring matter. She should recognize the good and beautiful everywhere, and in all things, and bring to her work a loving consecration and tenderness that will make it a true success. She will never forget the man or woman that hides in the little child of to-day, and her work will be deep and progressive.

THE MOTHER LOVE.

"A partnership with God is motherhood, What strength, what purity, what self-control, What love, what wisdom belongs to her Who helps God fashion an immortal Soul."

She who feels this, as every devout and worthy mother must feel it, will know the need of the highest and fullest education to help her in her holy work. There is nothing that a woman can do that can compare with this work for beauty and sacredness; none that requires greater preparation or deeper training of heart, mind and hand. Textbooks may do much for her, but, after all, the best of the mother's education comes not from books but is a something deeper and better than all this; a something God-given that begins with the little girl's love of her dollie and grows with her growth, strengthens with her strength, up to the time when with the consciousness of the new life beating within her own, God holds her apart and talks to her of love and renunciation, of self-denial and self-sacrifice that shall bring a most holy joy and fulfillment of desire.

Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—ALL WOOL.

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a LOWELL INGRAIN.

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: LOWELL INGRAINS are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a LOWELL INGRAIN when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a LOWELL INGRAIN.

Manufactured by BIGELOW CARPET CO., New York

While she waits for fulfillment she is in God's school and He is her teacher with love as the theme and the text. It is a holy, holy time that a woman wastes only with great loss to herself and her child. She walks with the Most High in His creative garden and gathers there rich stores of wisdom. She keeps the windows of her soul open on the sunward side and the light shines in clear and strong and vivifying.

Tested Recipes.

Chestnut Patties.—After the nuts have been cooked tender and mashed, add to 1 pint of nuts $\frac{1}{2}$ cup cream, two well-beaten eggs, a quarter cup of sugar, a cup and a half of milk and a salt spoonful of salt. Line patty shells with a good paste, fill with the nut mixture and bake quickly.

Cream of Chestnut Soup.—Take the shells off a pint of chestnuts and cover with boiling water. After five minutes rub off the brown skin. Cook until tender in boiling salted water to cover, then mash through a colander and return to the water in which they were cooked. Add 1 pint of hot milk or veal stock, a tablespoonful of butter and salt and pepper to season. Simmer ten minutes. Take from the fire and stir in a beaten egg and serve at once with croutons. A cup of cream is an addition, and more milk may be added if the puree seems too thick.

Chestnuts as a Vegetable.—After the nuts are peeled and blanched throw into a bowl of cold water. Put 4 table-spoonfuls of butter in a saucepan, with 2 tablespoonfuls of flour and cook until blended. Add 2 cups clear broth and stir until smooth. Salt and pepper to taste. Add the dried nuts, cover and simmer gently until the nuts are tender.

Chestnut Stuffing.—For a plain forcemeat, shell and blanch two quarts of nuts and boil in water to cover until tender. Drain and mash. Add to the nuts 3 tablespoonfuls of butter, a level teaspoonful of salt, a saltspoonful of pepper, a teaspoonful of minced onion, 2 tablespoonfuls breadcrumbs and the yolks of 2 eggs. Mix thoroughly and stuff. This makes enough for a turkey. If a richer forcemeat is desired, add to the above dressing 2 tablespoonfuls minced ham, veal or sausage, a tablespoonful of parsley and a little powdered thyme and grated lemon rind.

Daviled Chestnuts.—Shell and blanch as many chestnuts as are desired. Dry thoroughly. To every cupful of the meat allow a teaspoonful of olive oil. Pour in with the nuts and let them stand in the oil for half an hour. Place in a clean tin or frying pan, dredge with salt mixed with a little cayenne, and let the nuts brown in the oven about fifteen minutes. Stir and shake the pan often, until the nuts are a crisp, delicate brown.

Fried Peanuts for Luncheon.—Shell the nuts, brush off the brown skins, then toss in hot butter or olive oil until crisp and smoking hot.

Peanut Pick-Me-Up.—When you come in tired from a shopping trip, try a glass of milk, hot or cold, thickened with chopped peanuts.

Butternut and Apple Salad.—Cut small round slices from the tops of a half dozen nice, tart, red apples. Hollow them out, making the pieces scooped out as large as possible, but taking care not to spoil the shape of the apple. Cut the pieces into cubes and put into a bowl with an equal quantity of celery hearts of the same size pieces and butternut meats. Add a cup of mayonnaise, mix lightly then add a half cup of whipped cream, toss and fill the apples. Serve on individual plates with a couple of crispy lettuce leaves underneath the apple, or arrange in a low salad bowl.

"A Kalamazoo Direct to You"

You save from 20% to 40% by buying a Kalamazoo Stove or Range direct from the factory at lowest factory prices. Moreover, you get a stove or range not excelled by any in the world. We guarantee quality under a \$20,000 bank bond.

We Ship On 360 DAYS APPROVAL and We Pay the Freight.

If you do not find the Kalamazoo exactly as represented, the trial does not cost you a cent. It will pay you to investigate.

Send Postal for Catalog No. 189.

All Kalamazos are shipped promptly, blacked, polished and ready for use.

Kalamazoo Stove Co., Mtrs., Kalamazoo, Mich.

All our cook stoves and ranges are fitted with patent oven thermometer which makes baking easy.



The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS

DRAUGHON'S Business Colleges

Ft. Scott, St. Louis, Kansas City, Oklahoma City and Muskogee. 26 colleges in 15 States. POSITIONS secured or money REFUNDED. Also teach BY MAIL. Catalogue will convince you that Draughton's is THE BEST. Call or send for it.

KANSAS ANTI-LIQUOR SOCIETY

We are distributing free to all who write and inclose a stamp, a prescription for the cure of the liquor habit. It can be given secretly in coffee or food. Also a recipe for the cure of the tobacco habit, that can be given secretly. The only request we make is that you do not sell the recipes, but give free copies to your friends. KANSAS ANTI-LIQUOR SOCIETY, Room 77 Gray Bldg., KANSAS CITY, MO.

E. G. KINLEY, Topeka, Kans.

Manufacturer of and Dealer in CARRIAGES, BUSINESS WAGONS, &c. Buggy Tops Wholesale and Retail. Special Prices on Spring Wagons. Order Work, Repairing, and Rubber Tires.

Repository, 116 West Fifth Street. Factory, 424-426 Jackson Street. Ind. Phone 699.

AGENTS WANTED Sell \$1 bottle Sarsaparilla for 35¢, best seller; 200 per cent profit. Write today for terms. F. E. Greene, 116 Lake St., Chicago.

The Young Folks

A Place for You.
There's a niche for you in the world,
my boy,
A corner for you to fill;
And it waits to-day,
Along life's way,
For the boy with a frank, "I will!"
So, lad, be true,
The world wants you
In the corner that you may fill.

There's a niche for you in the world,
my girl,
A corner for you to fill;
For a girl that is kind,
With a pure, sweet mind,
A place that is waiting still.
So, lass, be true,
The world wants you
In the corner that you may fill.

The world has places for you, dears,
Has corners for you to fill,
And a work to do
Which no one but you
In God's great plan can fill.
So, dears, be true,
The world wants you
And your places are waiting still.
—Temperance Banner.

Washburn College to Have a Million Dollar Endowment.

At the anniversary of the founding of Washburn College, at Topeka, President Plass announced that the first \$100,000 of the proposed \$1,000,000 endowment had been raised. This endow-

ment movement was authorized by the trustees less than a year ago. The time set for completing the million is ten years.

The readiness with which the vigorous administration raised the first year's quota of the endowment, and the fact that this is added to the previously provided plant of \$600,000, is ample assurance of the success of the new forward movement.

Modern educational institutions always expend for the benefit of their students far more than the students pay. The excess cost is most surely and easily provided by an income-producing endowment fund. It is not to be doubted that the million proposed for Washburn will be followed by other millions in future decades, the number of these future millions depending somewhat upon the continuance of the vigorous and businesslike administration of President Plass which has now continued for four years.

The college at the Capital has a veritable endowment in one fact alone—the immense advantage of its location at the heart of the State's life and interests. Long-headed parents and their children in increasing numbers have been thinking out these manifest advantages and have wisely availed themselves of them. This commanding fact was clearly recognized in the letter read on Washburn Day from Justice David J. Brewer of the United States Supreme Court, who said: "Washburn is so situated that no other institution can be so fully in touch with the public life of the State, and at the same time reach all places within its limits

with the uplifting influences of the best education."

Attention does not need to be called to the fact that it is of immense advantage as a correction of theoretical acquisition to have at closest hand a great, active, civic and social laboratory to give the touch of reality to the book-learning. The capital city and its manifold public life preeminently furnish this.

But Washburn has not had to bank solely on its location to win its widening popularity. In the largeness of its spirit it has been as "catholic" as its life has been cosmopolitan. Built in the spirit that founded Harvard, Yale, Dartmouth, Amherst, Williams, Oberlin and so westward, it is, as they, essentially democratic. It is distinctively and aggressively Christian. On its faculty it has 22 Presbyterians, 11 Episcopalians, 10 Methodists, 6 Baptists, and so on, beside the Congregationalists. Broad-minded people are glad to patronize a school which is hospitable to all faiths, and which emphasizes the vital, essential things of a religious training.

There are ten buildings on the Washburn campus, and three more are in other parts of the city, one owned (the Kansas Medical College), and two leased (the Medical Dispensary, and the School of Law). All visitors, even the State Board of College Examiners, Chancellor Strong, President Nichols, President Wilkinson, and others have

just expressed their surprise and gratification at the fullness of the facilities for the best work which the college now offers.

George Washington.

When one reads the life of Washington and traces him along from early boyhood, we cease to wonder that he became so great. The very traits of character he showed and developed, would inevitably lead to something out of the ordinary. He was truthful as we all know, by the story of the little hatchet and other similar incidents. He was honest and industrious when in play or work. He was always a leader, not because he thrust himself there by force on account of superior physical strength alone, but because of the something within that asserts itself which we call strength of character.

He was thorough and whatever he did was done the best it could be done. When he was sixteen years old he and a young friend were sent out by Lord Fairfax, to survey a large tract of land owned by him. They lived in the wild woods roughing it for six weeks, and when they returned the Governor heard how well they had done the work, and he made George a public surveyor. The lines that he laid down were the ones used by the new States years after his death. He was brave. He was always found at the front in the fiercest battle, and was not afraid to go where he sent his soldiers. He was loved by all who knew him. Even the Indians loved and trusted him. It is truly said of him, "He was first in war, first in peace, and first in the hearts of his countrymen."



**EDDYSTONE
PRINTS**

Simpson - Eddystone Silver Greys

The quality of these standard dress goods, unequalled sixty years ago, has steadily improved with the advance of modern ideas and methods. Beautiful patterns. Fast color. Serviceable at any season.

Ask your dealer for
Simpson-Eddystone Silver Greys.
Three generations of Simsons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia

Aunt Kate to Katharine.

Chicago, February 14, 1906.

My Dear Katharine:—I was much amused to learn that you do like "Don'ts," and that you would like a list of mistakes against which to guard at a dinner party.

Well, my dear, I hardly know where to begin. The young girl of whom I wrote you in my last letter, should not have led the conversation, for one thing, as she was many years younger than any of the other ladies present. Her mother was one of the guests, but she was quite overshadowed by her young daughter. Nothing is more attractive

**LOW
ONE-WAY RATES
VIA
UNION PACIFIC
FROM
TOPEKA
EVERY DAY**

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00	to San Francisco, Los Angeles, San Diego and many other California points.
\$25.00	to Everett, Fairhaven, Whatcom, Vancouver and Victoria.
\$25.00	to Portland, Astoria, Tacoma and Seattle.
\$25.00	to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.
\$22.50	to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.
\$20.00	to Butte, Anaconda, Helena, and all intermediate main line points.
\$20.00	to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

Heart Weakness.

Dr. Miles' Heart Cure has made many hearts well after they have been pronounced hopeless. It has completely cured thousands, and will almost invariably cure or benefit every case of heart disease.

Short breath, pain around heart, palpitation, fluttering, dizzy, fainting and smothering spells should not be neglected. Take Dr. Miles' Heart Cure and see how quick you will be relieved.

It cannot make a new heart, but will restore a sick one by strengthening the heart nerves and muscles, relieving the unnatural strain, and restoring its vitality.

"I had a very bad case of heart trouble. For six months I could not work. Last July I was plowing corn and feeling bad all day; in the afternoon in plowing one row I had to lay down, or fall down, three times. My heart throbbed as though it would burst through, and I had difficulty in getting my breath. I purchased a bottle of Dr. Miles' Heart Cure, and before I had used half of it I could lay down and sleep all night. Previously I had to get up from five to ten times a night. I have taken several bottles, and my heart is as regular as clock work. I feel like a new man, and can work considerable for an old man, 84½ years old."

H. D. McILL, Frost, Ohio.
Dr. Miles' Heart Cure is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails he will refund your money.
Miles Medical Co., Elkhart, Ind.

than for young people to have a manner of thoughtful deference for those older.

She should not have rested her arms on the table.

She should have been watchful as to the needs of those sitting either side of her. Her voice should have been distinct, but not loud. A friend of mine who has spent some time abroad, told me not long ago, that a French lady once said to her, "Tell me why it is that the American young girl has so fine a face, and so harsh a voice." So one of the things for my niece to cultivate is a sweet and well-modulated voice.

This reminds me of a delightful, old Kentucky gentleman, who was telling me of his first meeting with the lady who became his wife. "You should have heard her voice," he said, "I fell in love with her voice at first sight."

Another thing to guard against is self-consciousness. I suffered so intensely when I was a girl, from the fact that I could not forget myself, that it made me awkward and ill at ease, and spoiled many a pleasant evening for me. Timidity needs to be overcome, as well as too great freedom of manner. Another thing which offended me about this girl of whom I seem to be making an example, was that she referred to her gentleman friends more than once during the meal as, "the follows." This may have been some sort of new slang which I have not before heard. In any case it sounded rough.

Don't talk too much about the different forks and spoons beside your



Four of the ten buildings on Washburn College campus, rear view, from the dome of the Astronomical Observatory, looking toward the State Capitol, northeast, showing the Administration Building, MacVicar Chapel, Rice Hall, and the new Carnegie Library.

plate. This girl did. It's as old as the finger-bowl jokes and as lacking in fun.

It is more than likely that you will not always know which one you are expected to use, if it is a dinner of many courses. But you can keep your eyes open and watch your neighbors, and you are not apt to make any alarming mistakes about them.

Don't hurry; eat your food as if today and to-morrow were before you. This is another place where we Americans are making a mistake, and both our manners and our digestions are bound to suffer from it. We eat each meal as if the carriage were waiting at the door to take us to the train.

And finally, remember always, that we do not attend a dinner party wholly for the pleasure we may gain ourselves, but quite as much for the pleasure we may help to give others.

Young girls have a wonderful opportunity, Katharine. If they hold high standards themselves, and demand high standards in other people, society must needs feel the uplift.

There is nothing on earth so sweet and attractive, and altogether irresistible as a young girl—a young girl of the right sort.

"Standing with reluctant feet,
Where the brook and river meet
Womanhood and childhood fleet."

"Bear thro' sorrow, wrong and ruth,
On thy brow the smile of truth;
In thy heart the dew of youth."

Your loving and moralizing
AUNT KATE.

The Little Ones

"Things That S'prise You."
There's lots of things that s'prise you
When you're little just like I;
When you bump your head they tell you,
"Oh, you're too big to cry!"
But when there's pie for dinner,
And you want another bite,
The big folks say, "Oh, no, indeed,
You are too little, quite."

Then when there's company, you know,
They wash you up so clean,
And tell you little bits o' folks
Must not be heard, but seen.
But next thing that you know about
You hear 'em say, "Now, dear,
Stand up and say your little piece
For Mrs. Smith to hear."

That's just the way things s'prise you
When you're little just like I,
But I s'pose you'll understand 'em
When you're older, by and by.

—Exchange.

Little George Washington.

When George Washington was nine years old he wrote a little letter to his best friend, Richard Henry Lee, and here is a copy of the letter:

"Dear Dickey: I thank you very much for the pretty picture-book you gave me. Sam asked me to show him all the pictures, and I showed him all the pictures in it; and I read to him how the tame elephant took care of his master's little boy, and put him on his back, and would not let anybody touch his master's little son.

"I can read three or four pages sometimes without missing a word. Ma says I may go to see you and stay all day with you next week. If it be not rainy. She says I may ride my pony, Hero, if Uncle Ben will go with me and lead him.

"I have a little piece of poetry about the book you gave me, but I must not tell you who wrote the poetry.

"G. W.'s compliments to R. H. L.

And likes his book full well.

Henceforth will count him as his friend,

And hopes many happy days he may spend."

"Your good friend,

"GEORGE WASHINGTON.

"I am going to get a whip-top soon, and you may see and whip it."

No Tact.

Mistress—"Why did you leave your last place?"

Domestic—"Th' missus had no tact, mum."

Mistress—"Ah, I see. That is often the case."

Domestic—"Yes, mum. She was always tellin' me to do things, 'stead of askin' me to."

Have you ever had your day suddenly turn sunshiny because of a cheerful word? Have you ever wondered if this could be the same world, because some one had been unexpectedly kind to you? You can make to-day the same for somebody. It is only a question of a little imagination, a little time and trouble. Think now "What can I do to-day to make some one happy?"—Maltbie D. Babcock.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Oshorne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultur Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County.
Take Embroidery Club, Madison, Greenwood County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1903).
Prentis Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

FAMOUS WOMEN.

Gail Hamilton.

I. A sketch of the author's life.
II. Reading from "Stumbling Blocks."
III. A writer for young folks.
IV. The story of "Wool Gathering."
I. "Gail Hamilton" is the name by which Mary Abigail Dodge is best known. She was a writer of many books, also editor of "Our Young Folks." She was associated with James G. Blaine's family, being a cousin of his wife, and it is said she was his advisor and he relied greatly upon her judgment. Hers was a very active, a brilliant and an interesting career.

II. Selections from "Stumbling Blocks" or any other of her many books may be read, thus catching a glimpse of her style, and a little insight into her character, besides the pleasure and knowledge to be derived from them.

III. A study of her life will disclose characteristics that show how adequately she was fitted to be a writer for young people. One must be peculiarly endowed to be successful in this line of writing.

"Wool Gathering" was written about thirty-five years ago and it was this book that first brought her into notice. She invested in a sheep farm in the West and lost all she invested, and this book was the outcome.

A Golden Rule for Clubs.

One of the things that the club is doing for women is the elimination of gossip. It gives her something beside personalities to think about, and helps her to be charitable to others. The following resolutions will be helpful in this direction:

"Whereas, we are all human and therefore love gossip, let us resolve:

"That we will cultivate a spirit of love and patience for every other woman in the club, as we wish it cultivated for us;

"That if we hear a word of criticism on another member, her words, actions or dress, we will not repeat it;

"That we will not answer such criticisms, except to say something good of her who is assailed;

"That we will make our club a place where helpfulness and kindness go hand in hand;

"That the Golden Rule is just as good a guide to club life as it is to home life; and that we will adopt it and practice it."

The editor of this department is very anxious to make it helpful to club members, and believing a woman's club to be one of the best uplifts to woman-kind, and a power for good in the home and the community, is desirous that many more such clubs be organized. If in any way this department may be more helpful, suggestions will be gladly received, and any information desired will be given, if possible. The names of clubs, a history of their work and anything that will be of interest to other clubs are requested. Papers that are especially interesting, read at clubs, and suggestions or club programs are very acceptable.

Royal Baking Powder Absolutely Pure

DISTINCTIVELY A CREAM OF TARTAR BAKING POWDER

It does not contain an atom of phosphatic acid (which is the product of bones digested in sulphuric acid) or of alum (which is one-third sulphuric acid) substances adopted for other baking powders because of their cheapness.

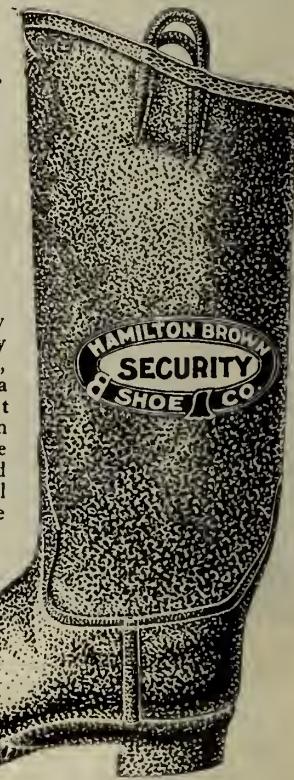
This Boot is Made for Good Hard Wear

Only the best new rubber and the best duck are used, put together in such a way as to give the greatest strength where it is needed.

Security LYCOMING DUCK BOOT

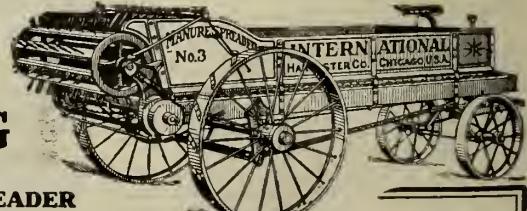
can't afford to wear out as soon as the ordinary kind—it's got a reputation to sustain. We strongly recommend "Security Boots" to Farmers, Irrigators, Stockmen, Fruit-growers and every man who needs a good boot. Like everything else, it will wear out, but it is built to give the greatest amount of satisfaction possible. Boots made of old rubber cannot stand the wear—there's a dollar's worth of pure rubber and good duck for every dollar spent in the "Security." All "Lycoming" Rubber Boots and Shoes are of the highest quality only.

Go to your dealer and try on a pair. Note carefully how well made they are. If your dealer does not have them in stock he can easily get them for you.



THINGS WORTH KNOWING

If you are going to buy
A MANURE SPREADER



No machine within his reach is capable of doing so much for the farmer as the modern manure spreader.

But then it must be a machine with features—features of economy and efficiency.

The I. H. C. Manure Spreader has such features.

Any man of experience knows that a spreader only works perfectly when the load is level.

The I. H. C. Spreader is the only spreader with a vibrating rake in front of the beater or cylinder which levels every load and any load of manure.

Any man knows that the apron operates better when power is applied at both sides.

The I. H. C. spreader apron is driven at both sides from both hind wheels.

This saves all torsion, binding, friction and undue strain, and consequently saves breakages and results in lighter draft.

One lever is better than many levers in operating any machine.

The I. H. C. spreader is the only spreader which is controlled and operated entirely with one lever.

It has ten different feeds—can be adjusted

instantly while in motion to spread three to thirty loads per acre.

Large, solid, steel axles front and rear—front wheels cut under—turns very short.

Steel wheels—no rotting or drying out. Broad faced tires with turned in flange to keep out dirt, mud, etc. Lightest and strongest.

Provided with traction lugs on rear wheels—will work perfectly on hard, frozen or wet ground.

Made in various sizes to suit all requirements.

The I. H. C. spreader will distribute perfectly manure of all kinds—wet, dry, mixed, strawy, full of stalks, frozen, caked, etc.

It may be equipped with special features known as lime and drill attachments for distributing broadcast, or in drills, fine manure, commercial fertilizers, lime, ashes, salt, cotton seed hulls, land plasters, etc.

Remember what we have told you—it is the manure spreader with special features which all make for success.

Go to the International Local Agent and look it over, get and read the catalogues or write for further information. It will pay.

International Harvester Company of America,
(Incorporated)
Chicago, Illinois, U. S. A.

OLDS ENGINES

There is no gas engine as simple as the Olds—Compare it with others and this statement is proved. The repairs cost practically nothing.

The Most Economical Engine

for pumping, sawing wood, feed grinding, churning and all farm work. The reason why is interestingly told in our catalog mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalog showing Type A (2-8 h.p.) Type G (8-50 h.p.), Types K and N (12-1200 h.p., used with our Gas Producer, it will reduce fuel cost 75 per cent.)

Celebrated Picture Free

For 4c in stamps to pay cost of mailing we will also send you Rosa Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16 x 20, beautifully colored, perfect for framing.

OLDS GASOLINE ENGINE WORKS
920 Chestnut St., Lauslug, Mich.

EUREKA BOILER
or STEAM FEED COOKER

Saves half your corn or other feed. Saves labor in feeding. It will steam moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information.

John Deere Plow Co.
Denver Kansas City, Mo.

CAMPBELL SYSTEM
FARMING ASSOCIATION

Membership \$5.00. Organized to educate farmers to use the Campbell System of soil culture. Dry Farming Magazine, edited by Mr. Campbell, \$1.00 per year, including Campbell's Manual. Send ten cents for sample copy today. Cash discount on Campbell machinery to members only.

The Campbell System Farming Association,
1716 California St. Denver, Colorado

GOOD ROADS How to Acquire Them
Every citizen should read it. Send two 2-cent postage to

JOHN L. SCHILLING,
1911 Lawrence Ave., Toledo, Ohio

Collections made in all parts of the United States
No fee charged unless Collection is made
BOTH PHONES NO. 1577

The Kansas Collection Agency
415 Kansas Avenue.
TOPEKA. KANSAS
Special attention given to stock-breeders accounts.
Reference furnished on application.

You Will Prosper
in the Great
Southwest

In Oklahoma, Indian Territory and Texas are vast areas of unimproved land—land not now yielding the crops of which it is capable. The same conditions apply to the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and factories, for small stores, for banks, newspapers and lumber yards. You have only to get on the ground to prove this. To enable you to do so the Missouri, Kansas & Texas Ry offers

Rates Cheaper Than Ever
February 20th and
March 6th and 20th

On above dates most lines will sell both one-way and round-trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

If you're in any way interested in the Southwest, I'd like to send you my paper "The Coming Country." Address

W. S. ST. GEORGE
General Passenger Agent
580 Wainwright Building, St. Louis, Mo.
Tickets on sale everywhere, via



Miscellany

Kansas' Greatest Year.

Agriculturally the year 1905 has been the most fruitful in the State's history, as shown by Secretary Coburn's invaluable report, and the worth of its farm products and live stock is the largest ever recorded for Kansas. It is greater by \$41,222,703, or 11.3 per cent than in 1904; is over twenty-eight million dollars more than twice as much as their value in 1896—ten years ago, and is considerably more than their combined values in the first two years of the past quarter century. For the first time the value of Kansas' agricultural productions and live-stock amount to more than four hundred million dollars—the nearest approach to this being in 1903, when the amount aggregated \$387,500,000. As suggestive of the present situation, it may be said that this year's wheat is worth more than that of any other year's crop; with one exception the same is true of corn, and the State is richer in live-stock than ever before.

The year's aggregate value of farm products and live-stock is sufficient, if equally divided among the State's inhabitants, to give each, whether adult or infant, \$264, and this, together with the per capita amount of over \$76 on deposit in Kansas banks, institutions patronized chiefly by farmers, indicates a degree of prosperity most substantial and gratifying.

WHEAT.

The total yield of wheat, winter and spring, of superb quality, was 77,178,177 bushels; this is over 12 million bushels, or 18.4 per cent, more than the output of 1904; sixty-two per cent greater than the annual average for the past twenty years, and is the fourth largest crop produced by Kansas. Its home value is given as \$53,871,624, showing it to be the greatest income-bringing wheat crop ever raised in the State, nearly 4.8 per cent greater in value than the 1904 crop, and \$1,445,269 more than the returns from the crop of 1903, which heretofore held the record for highest aggregate value.

That the Kansas wheat-farmer has been particularly prospered in recent years can well be concluded from the fact that in the past five years, ending with 1905, Kansas raised two wheat crops of over 90 million bushels each, one of over 77 million bushels, one of over 65 million bushels and one of about 55 million bushels, aggregating 381,344,039 bushels in the five years, worth \$237,457,229, or an average annual output of 76,268,808 bushels, worth an average of \$47,491,446.

The most valuable four wheat crops produced by Kansas have been raised in the past five years, as follows:

1901	.....	\$50,610,505
1903	.....	52,426,355
1904	.....	51,409,255
1905	.....	53,871,624

Of this year's crop 1,335,518 bushels is of spring wheat, a considerably larger quantity than is ordinarily produced, and its value is given as \$783,974.

Of winter wheat the area sown, as reported by assessors in March, was 5,835,237 acres. The largest yields per acre this year were in the eastern counties, in fifteen of which they ranged from 20 to 27 bushels, Lyon and Coffey reporting the latter. Thirty-three counties each had one million bushels or more, aggregating 70 per cent of the year's crop. The leading six counties in winter wheat, and their output, named according to rank in yield, are:

	Bushels.
Barton	4,999,335
Beno	2,910,670
Sumner	2,343,654
Pawnee	2,302,924
McPherson	2,232,464
Stafford	2,169,772

Correspondents report that last fall's sowing will aggregate about 5,900,000 acres, an increase from one year ago of 64,763 acres, or 1.1 per cent. Seventy-five counties, located in various portions of the State and more or less noted for their wheat-production report the same or increased areas. Calling

I Save You \$50

How My New Direct from Factory Selling Plan Gives You All Jobbers', Agents' and Dealers' Profits on Knodig Scales.

No Money Down—No Notes to Sign.
30 Days Trial—10 Years Guarantee.

My name is Gumbel, H. C. Gumbel.
I am Manager of the National Pitless Scale Co. of Kansas City, Mo.

I make the famous Knodig Pitless Scale, which for many years has been sold to Farmers, Stockmen, Grain Dealers, and others, through Jobbers, Agents and Retailers.

All scales, including the high priced, expensive Pit Scales, are still sold that way.

—But I have a new plan which saves the scale buyer all these middlemen's profits.

You now pay for the KNODIG PITLESS only one small profit, because you can buy it direct from the factory.

No other scale in the world is sold this way. If you question this statement, just write to any scale manufacturer and see how quickly he will turn you over to some agent or dealer.

But why should you pay more for the privilege of buying scales through a third party?

Does it make them any better to pay this extra profit?

Is there a single reason why you should not deal directly with the factory?

You buy Stoves, Incubators, Organs, Bug-gies, and a hundred other things that way—

—And save money by doing it!

Then, why not—Scales?

I will sell you a brand new 1906 model Knodig Pitless Scale direct from the factory for \$50, less than the price of a Pit Scale.

And it will be a better scale, too.

Because the KNODIG sets above ground, and all the working parts are inside the eight inch steel frame.

No pit is necessary, which saves you many annoying and expensive features, such as—

—Diggings and walling the pit.

—Renewing broken and rotted timbers.

—Dipping water and breaking ice.

—Replacing rusted parts caused by the dampness of a pit?

—Removing platform to get at the trash and dirt that constantly accumulate.

Old style pit scales may be all right for those who can afford them, and don't mind the

trouble and expense of keeping them in repair.

—But if you can save about half in price and have no pit to dig—no big lumber bills—no expensive carpenter jobs for foundations—

—Why shouldn't you buy a Knodig?

The KNODIG PITLESS is movable.

You can easily take it down and re-set it anywhere on the premises, wherever the work may happen to be!

It is as accurate as any high priced Pit Scale, because it is tested, as they are, according to the U. S. Standard of Weights.

KNODIG PITLESS SCALE bearings are made of black diamond and silver tool steel, proved by experience to be absolutely the best steel for the purpose.

The pivots are ground, gauged and tempered by expert scale makers.

The scales are sealed by an expert sealer.

And finally, to prevent any possibility of error, all KNODIG PITLESS SCALES are carefully passed upon by an Inspector of Weights, before shipment.

So, you see, they must be accurate.

We guarantee them unreservedly for ten years.

Other scales are guaranteed only on condition that heavy timbers must be kept in good condition, etc., etc.

I am willing to prove that the KNODIG PITLESS is the scale you want.

I will send a set to you, or to any responsible Farmer, Stockman, Elevator Man, or Grain Dealer on a month's free trial.

You have nothing to pay until you are satisfied,—no deposit,—no notes to sign,—nothing to do but give the KNODIG a fair, honest trial at my risk.

If it doesn't please you, just send it back, and I will pay freight both ways and the expense of setting it up on your place.

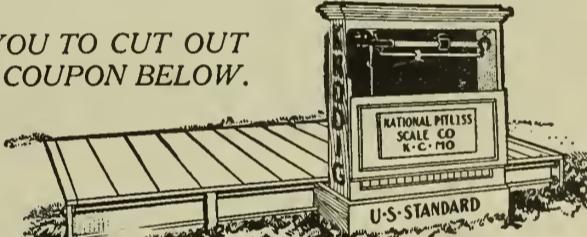
Surely this is a fair offer!

Address me personally. H. C. GUMBEL.

Manager of the

National Pitless Scale Co., 2017 Wyandotte Street, Kansas City, Mo.

IT WILL PAY YOU TO CUT OUT AND MAIL THE COUPON BELOW.



H. C. Gumbel, Manager

National Pitless Scale Co., Kansas City, Mo.

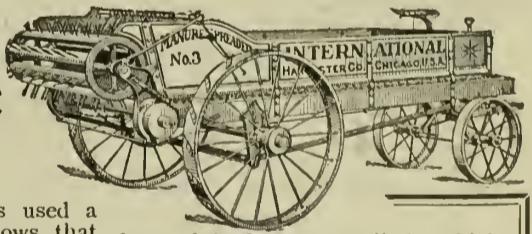
2017

Please send me, FREE, Catalog, full description, price, etc., of the Knodig Pitless Scale with all details of your New Direct Factory Selling Plan.

Name _____

Address _____

Double Manure Value.



EVERY man who has used a manure spreader knows that it doubles the value of the manure pile.

Those who have not had that experience will be convinced with the first trial.

It is not because the manure spreader puts more manure on the land, but because it tears apart, disintegrates and makes it fine that it all becomes available as plant food.

Of course it takes the right kind of a spreader to do this work perfectly.

The I. H. C. Spreader fits the case exactly.

It is not only an unusually strong, well built machine, thus being durable and continuing long in service, but it has features peculiarly its own.

For instance: It is the only manure spreader having a vibrating rake in

front of the beater or cylinder which levels the load as it passes backward towards the spreading mechanism.

You know, of course, that perfect spreading can only result when the load is level.

This spreader is entirely controlled and regulated in all its working parts by a single lever.

It will spread from three to thirty loads per acre, and the change necessary to produce these desirable results can be made instantly while the machine is in motion.

Power is applied to the apron of the I. H. C. Spreader from both sides—both rear wheels. This insures an even, steady feed and no strain, side draft or breakage.

The I. H. C. Spreader is equipped with broad faced steel wheels which are beat, because they are at once the lightest and strongest.

It will spread any and all kinds of manure in any condition, and can be equipped with special attachments for spreading in drills and broadcasting lime, compost, ashes, cottonseed hulls, land plaster, etc.

Made in several sizes to suit all classes of work and every section.

and look it over, get and read the catalogues, or write for further information. It will pay.

INTERNATIONAL HARVESTER CO. OF AMERICA, CHICAGO, U. S. A. (INCORPORATED)

LIGHTNING PORTABLE WAGON and STOCK SCALE

All above ground. Steel frame, only eight inches high. Octagon bases. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City May Press Company,

120 Mill Street, Kansas City, Missouri

REAL ESTATE.

A GREAT BARGAIN.—A fine 240 acres farm in Wabaunsee County, 50 acres in wheat, 45 acres in alfalfa, 50 acres in grass, balance in cultivation, first class corn land. Eight room frame house, corn crib, granary, barn for 8 horses, stone cattle shed 100 feet long and other buildings; well fenced, never falling wells, with windmill, piped to barn and feed yards with hydrant attached, elevated tank; 100 bearing fruit trees. Located on R. F. D., telephone in the house, three miles south of Bellevue, Kansas. Can sell on very easy terms. For further particulars write or address J. B. Fields, Real Estate and Loans, Alma, Kans.

TO TRADE for stock, good 160-acre farm in Cherokee County. H. H. High, Faulkner, Kans.

READ, CONSIDER, COME, OR WRITE 80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres, improved one-half bottom, will grow any farm crop, \$6,000. 480 acres, 16 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

FOR SALE—Improved farms, at prices from \$2 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realy Co., Clay Center, Kans.

A BARGAIN—160 acre farm, 80 in cultivation, balance pasture; 5 room house with cellar, new barn 36x50. Also cattle-shed, corncrib, granary, hen house, and implement-shed, well, windmill, orchard; 1½ miles to school 3½ miles to Alta Vista in Wabaunsee County. Price \$5,600. A. H. Meseke, Alta Vista, Kans.

KANSAS FARM LANDS for sale in Republic and Washington Counties, 180 miles from Omaha, St. Joe and Kansas City, located in the corn and alfalfa belt, where the farmer has got rich by feeding hogs and cattle and selling out to live a retired life; for prices and description of improved farms, write to J. E. Caswell, Belleville, Kans.

ANOTHER GOOD FARM FOR SALE—I am offering for a short time the following described farm for sale: 160 acres one-half mile south of Paxico, 145 acres in cultivation, 5 acres in fine orchard with all kinds of fruit, 5 room frame house with fine cellar, also a two-room tenant house, new barn 40x60, windmill and well with everlasting water at the barn, good well at the house, 5 acres hog pasture well fenced, 10 acres timothy, 15 acres blue-grass pasture, 15 acres alfalfa, good feed lot, a small stream running through the feed lot with an abundance of good water. Price \$7,000 to be paid as follows: \$3,000 cash, balance to suit purchaser with interest at 6 per cent per annum. J. B. Fields, Real Estate and Loans, Alma, Kans.

MORRIS COUNTY LAND—640 acres of fine land—adjoining railroad town, 500 acres of which is first class farm land; no buildings; price \$10,500. 320 acres good land, half in cultivation, 5 room house, new barn, only ¾ miles out; snap, \$7,500. Splendid ranch 480 acres—300 in cultivation—10 room house, barn, spring in corral, steel mill; alfalfa. Price \$13,000. Easy terms, 8,000 acres. Finest ranch in the county. Will sell by quarter, half or section. Apply to John Taggart & Son, White City, Kans. Mention Kansas Farmer when writing.

KANSAS LANDS—I have a choice lot of well-improved farms in Marlon County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Qulsenberry, Marlon, Kans.

FOR SALE—320 acre well improved farm, 6 miles from Emporia. Price, \$25 per acre. Write Hurley & Jennings, Emporia, Kans.

A 320-ACRE FARM within two miles of good town. Good new house, barn and stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Balnum, Arlington, Kans.

FOR RENT—Fine rice and alfalfa farm, near Houston, Texas. Address Dr. F. M. Willes, Indianapolis, Ind.

BUY FROM OWNER—This fine alfalfa and sugar-beet farm, near school and town, only 6 to 12 feet to inexhaustible supply of sheet water; a bargain for quick sale. James A. Jackson, Syracuse, Kans.

40 ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale, California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Balnum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmett, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R. C. Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock or fruit farms. I have farms in Oklahoma, Missouri and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE in western part of the great wheat State. H. V. Gilber, Wallace, Kans.

832 ACRE FARM, McPherson County, 3½ miles from good town, close to school, 210 acres first bottom, remainder second bottom, up-land, meadow and pasture, excellent improvements, including fence, house, barn and out-buildings; fine bearing orchard, alfalfa, excellent water and timber. Price \$23 per acre. C. E. Carlson, Odd Fellows Building, McPherson, Kans.

FOR SALE—160 acre tract 6 miles N. E. of Council Grove, Morris County, 100 under cultivation, balance mow land. \$3,500. Easy terms. Eastman & Lakin, 115 West 6th Ave., Topeka.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class, well-equipped dairy farm. M. V. RICHARDS, Land & Industrial Agent, Washington, D. C.

a satisfactory stand and healthy condition 100, the general average of the growing wheat for the State is now 80.4. Five counties in the eastern third of the State have conditions of 100 or over, and in fact the best conditions prevail throughout the section named, most of the counties reporting 90 or better. Soil and weather in some portions of the State were quite favorable for sowing, and since for germination and growth; in others opposite conditions existed, owing to the lack of sufficient moisture. Notably is this the case in about twelve of the prominent wheat producers and to a greater or lesser degree in localities here and there in other counties, for the most part confined to a block of the State's area 150 miles square measuring westward from the eastern border of Republic County, which includes the twelve counties before mentioned. Norton reports the lowest condition, 54, and Trego next with 58. The presence of insects is noted in some fields, but so infrequently as to cause little, if any, apprehension.

CORN.

The corn crop amounts to 190,519,593 bushels, the largest since 1902, and 58,500,000 bushels more than that of 1904; its value is \$68,718,584, which, with one exception, is the most valuable corn crop produced in the State. The corn, by more than one million dollars, outvalues that of the year's wheat, oats, rye, buckwheat, broomcorn, flax, and Irish and sweet potatoes combined. Thirty-two counties, all except three in the eastern third of the State, report yields per acre of 30 or more bushels, the highest being 38 in Wyandotte, followed by Brown, Jefferson, Leavenworth and Miami, each credited with 35 bushels per acre. Forty-three counties show aggregate yields of 2 million or more bushels each, Jewell leading (as last year) with 6,241,952 bushels; Marshall coming next with 6,173,898 bushels; Nemaha third with 5,863,854 bushels; Washington fourth with 5,162,940 bushels and Republic fifth with 5,074,080 bushels.

The area devoted to corn this year was 6,799,755 acres, an increase over that of 1904 of 305,597 acres, or 4.7 per cent. The average yield per acre for the entire State was 28 bushels.

SORGHUMS GRAIN AND FORAGE.

The non-saccharine varieties of sorghums have all increased in acreage, while the sweet sorghums show a decrease; the combined value of these is \$8,107,135.

HAY AND LIVE-STOCK.

Tame and prairie hays yielded well and in quality are probably above the average. The returns indicate a larger supply of hogs than one year ago, and from no quarter is disease reported among live stock.

KANSAS CROPS AND PRODUCTS IN 1905.

The yields and values of the year's crops and products are as follows:

	Number.	Value.
Winter and spring wheat, bushels.....	77,178,177	\$53,871,624
Corn, bushels.....	190,519,593	68,718,584
Oats, bushels.....	9,712,954	2,800,850
Rye, bushels.....	1,114,390	578,981
Barley, bushels.....	9,712,254	2,800,850
Buckwheat, bushels.....	12,730	11,457
Irish and sweet potatoes, bushels.....	7,373,102	3,897,352
Castor beans, bushels.....	2,160	2,700
Cotton, pounds.....	45,900	4,590
Flax, bushels.....	587,169	506,177
Tobacco, pounds.....	12,405	1,241
Broom-corn, pounds.....	9,585,030	300,423
Millet and Hungarian, tons.....	498,816	1,765,434
Sorghum for syrup, gallons.....	1,477,890	591,156
Sorghum, Kaffir-corn, Milo maize and Jerusalem corn for forage.....		8,107,135
Tame hay, tons.....	1,805,776	9,028,880
Prairie hay, tons.....	1,757,367	6,493,242
Wool clip, pounds.....	483,067	101,444
Cheese, butter and milk.....		8,568,350
Poultry and eggs sold.....		8,541,153
Animals slaughtered or sold for slaughter.....		52,617,860
Horticultural and garden products.....		3,500,121
Honey and beeswax, pounds.....	1,823,688	257,309
Wool marketed.....		167,893
Total value.....		\$238,818,666

	Number.	Value.
Horses,	879,258	\$72,978,414
Mules and asses.....	114,091	10,838,645
Milch cows.....	763,803	19,095,075
Other cattle.....	2,637,222	50,107,218
Sheep.....	158,591	586,787
Swine.....	2,133,555	16,215,018
Total value.....		\$169,821,157
Grand total.....		\$408,639,823
Product of 1904.....		

REAL ESTATE.

Twenty-five Bushels

of WHEAT
to the Acre
means a productive capacity
in dollars of over
\$16 per Acre

This on land, which has cost
the farmer nothing, but the
price of tilling it, tells its own
story. The

Canadian
Government

gives absolutely free to every settler
160 acres of such land.

Lands adjoining can be purchased at
from \$6 to \$10 per acre from railroads
and other corporations.

Already 175,000 farmers from the
United States have made their homes
in Canada.

For pamphlet "20th Century Canada,"
and all information apply to Superin-
tendent of Immigration, Ottawa, Can-
ada; or to the following authorized
Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.

CASH for your real estate or business,
no matter where located. If you want your prop-
erty sold quickly send us description and price.
N. B. Johnson & Co., 517 Bank Commerce
Bldg., Kansas City, Mo.

FOR SALE—A good farm of 320 acres in An-
derson County, Kansas, main line Missouri
Pacific Railway, R. F. D., near to school and
church. American community, good improve-
ments; \$22 per acre. A bargain. Address O.
J. Prentice, 156 Wabash Avenue, Chicago.

FINE STOCK FARM FOR SALE—640 acres,
one-half in cultivation, balance in pasture,
mostly seeded to Kentucky blue-grass, well
watered, about 40 acres in alfalfa, all fenced
and cross fenced, beautiful lawn with shade,
large eight-room house, commodious barns for
stock and hay, fuel, poultry, and ice houses
and other outbuildings, feed yards, corrals,
stock sheds, one tenant house; convenient to
church and school, on Rural route; 1½ miles
from station on double track railway, 12 miles
east of Topeka, the State capital, 54 miles
west of Kansas City, in the midst of a splen-
did farming country. It is now occupied by
the owner, who has lived there for more than
thirty years. Price, \$37.50 per acre. Easy
terms. Address WILSON & NEISWANGER,
111 W. 4th St., Topeka, Kans.

FOR SALE—80 acre improved farm
3½ miles N. E. of Harveyville, Wabaunsee
Co., 45 in cultivation, balance pasture;
7 room house, barn, crib and out-
buildings; \$2,500. Cash \$800. Eastman &
Lakin, 115 West 6th Ave., Topeka.

FOR SALE. 640-acre ranch, 4 miles from Stock-
ton, Kans.; big bargain of 320 acres at
\$8 per acre. Write STEVENS & RUBY, Stockton, Kans.

Mention Kansas Farmer.

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price
\$10 per acre, \$1,800 cash, balance in
small yearly payments, 6 per cent in-
terest. NIquette Bros., Salina, Kansas.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms
on Prairie Dog Creek. Soil is black loam that
yields big crops every year. This year an average
of 60 bushels of corn, about thirty acres in pasture
and timber, 15 acres in alfalfa, balance corn land.
Good house and barn and other farm buildings. On
account of change of business the owner desires to
sell soon. Address

M. E. Beall, Woodruff, Kans.

If you have farms, ranches, or city prop-
erties for sale or trade anywhere in the
State, we would like to have you list the
same with us by sending a thorough descrip-
tion together with lowest prices and best
terms. We have a fine list of city properties
in Topeka and farms around the city, some
for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS,
116 E. Fifth St., Topeka, Kans.

Leave DENVER (Union Depot)..... 8:00 a. m.
Returning, arrive..... 5:45 p. m.

REAL ESTATE.

Rooks County Land

Where Wheat, Corn and Alfalfa grow to
perfection. 37,500 acres fine farm land
for sale. For list and county maps, ad-
dress, C. H. DEWEY, Stockton, Kans.
(R. R. fare refunded if you buy of me.)
Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving
city of Kansas, 200 miles west of Atchison,
on the Missouri Pacific railway, in
the celebrated Solomon Valley, in Os-
borne County, where we raise corn,
wheat, alfalfa and other cereals, suc-
cessfully.

THE DOWNS REALTY CO.,
Downs, Kansas.

Hurley & Jennings'
Land Bargains

For Sale—40 acres improved orchard,
4-room house and stable, 3 miles from
College of Emporia, for \$1,200, on terms
if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate
and Loan Co.

Holton, Kansas,

Make a specialty of Texas ranch and
farm lands. Western Kansas lands in
any quantity. Send for descriptive
lists.

GEO. M. NOBLE & CO.
Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities
for investment. Our paper tells all
about resources, farming, timber, min-
eral lands. Copy free.

OZARK COUNTRY,
819 Wainwright, St. Louis.

H. C. BOWMAN,
SHAWNEE COUNTY FARMS.

TOPEKA RESIDENCE AND MERCAN-
TILE PROPERTY.

VACANT LOTS.

TEXAS RANCH LANDS.

42 Columbian Bldg., Topeka, Kans.

Wheat Farms on Easy Terms

We offer to BONA-FIDE SETTLERS their choice of one-hundred
160 acre farms in
Sherman County, Kansas

At from \$5 to \$15 per acre. ONE TENTH CASH, the balance payable in nine equal annual payments. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King,

= = =

McPherson, Kansas

PACIFIC COAST WONDERS.

How \$100,000 Is Being Spent in a Campaign of Enlargement.

The spending of \$100,000 is an interesting event, no matter who spends it or for what aims, but when it is devoted in an almost philanthropic way to the enlargement of those who seek better health, or new pleasure, or perfect rest, it is indeed worthy of remark.

The Sunset Magazine, that marvelous reflex of western life, published in San Francisco, recently contracted with N. W. Ayer & Son, the great advertising house, of Philadelphia, to spend \$100,000 in telling the people of the wonders of that scenic country extending from Los Angeles, California, to Portland, Oregon, now so easily accessible via The Coast Line and Shasta Route of the Southern Pacific Company.

To convey this message in such a graphic manner that every one everywhere would have a true mind-picture of the amazing things to be found in this land of perennial sunshine, required all the resources even of N. W. Ayer & Son, a veritable army of photographers, artists and writers, working hand in hand in preparing pages upon pages of interesting material for the great magazines and periodicals. When it was found that even this great space was too limited to tell a tithe of the story, a beautiful book was published for free distribution, containing rare color prints, fine engravings and most vivid pen pictures. "The Road of a Thousand Wonders" is the title of this book, and it is indeed well worthy of the name, for on its pages are depicted all the veritable wonders of California and Oregon, including the Home of "Ramona," the heroine of Helen Hunt Jackson's famous romance; the old Spanish Missions still used by the sombre-robed monks; the mysterious Cypress Forest on the great Seventeen Mile Drive; the historical town and bay of Monterey; the rose bushes that climb telegraph poles in midwinter; the pyramids of the Santa Lucia Mountains; the nature baths of Paso Robles Hot Springs; the orange and olive groves, the endless sea of blossoms that makes Japan look like a pea-patch; the Big Trees of Santa Cruz, the oldest living things on earth; the glories of the Sacramento Valley; the grandeur of snow-capped Shasta, and the inexhaustible game preserves of Oregon.

All this and so much more is described in this remarkable book—more remarkable when it is considered that

it has no price, and that any one may have one by writing to the distributor, Chas. S. Fee, Passenger Traffic Manager, Southern Pacific Company, 431 California street, San Francisco, California.

8,000 ACRES

Wheat and Alfalfa Land in Logan and Wallace.

These lands are prime No. 1 land, selected, smooth, well grassed and well watered. Price \$4 to \$6 per acre; part cash, and long time for balance.

Chas. A. Wilbur, 111 W. 6th St., Topeka, Kans.

S. M. WOOD & CO.

REAL ESTATE, RENTALS, LOANS.
Buy, Sell, or Exchange Wild Lands, Ranches, Farms, City, Property, Stock or Merchandise. Call or Write Us.

TOPEKA, KAN. 534 KANSAS AVE.

KANSAS, NEBRASKA AND COLORADO LAND FOR SALE.

250 Atchison, Brown and Jefferson County farms for sale at reasonable prices. Write me for full information. Wm. Dunkel, agent, Muscotah, Kans.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg., Topeka, Kans.

T If you want to know all about TEXAS and TEXAS EX
lands write for free sample X
A copies of the TEXAS STOCKMAN X
S & FARMER, San Antonio, Tex. S

100,000 ACRES OF IRRIGATED LAND



in Sunny Southern Alberta, Canada

THE LAND OF WINTER WHEAT, ALFALFA AND SUGAR BEETS

These lands are part of the great irrigation project constructed by the Canadian Pacific Ry. in the CALGARY DISTRICT OF SOUTHERN ALBERTA. We now have ready for the farmer one hundred thousand acres of these lands, lying on the northern side of the main line of the CANADIAN PACIFIC RAILWAY at Gleichen, extending back ten miles in a solid block,

at from \$18.00 to \$25.00 an Acre

The canals and laterals are to be maintained forever by the Canadian Pacific Ry. at a nominal cost of \$2 cents per acre per annum.

NO FLOODS, NO DROUGHTS, EVERY YEAR A HARVEST YEAR

This too on land that will produce 30 to 60 bushels of hard winter wheat, 80 to 100 bushels of oats to the acre, with enormous yields of alfalfa, sugar beets and all small grains. Remember, the lands are all adjacent to the main line of the Canadian Pacific Ry., giving easy access to the world's best markets. For further particulars and certificate for low railroad rates, write

Canadian Pacific Irrigation Col'n Co. Ltd.

CALGARY, ALBERTA, CANADA.

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

**A. L. BROWN, (the man who sells Osborne County lands),
Osborne, Kans.**

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow. Mention Kansas Farmer when you write.

Western Kansas Wheat Farms

Deal with the owner direct. Save commissions. Know you are getting your land at the right figure. We own and control 60,000 acres of the finest wheat and corn lands in central and western Kansas. We have one price for everybody. You can buy a farm on ten years' time with interest at 6 per cent, or you can pay cash and get 5 per cent discount. Our farms are bargains, every one of them, and are in the best counties of Northwestern Kansas; close to schools, railroads, towns and churches, in well settled localities. If you have \$300, you can own a farm and home of your own. No poor land.

The Grain Belt Realty Company, Concordia, Kansas

Getting What You Want

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and richest sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do.

Send for our booklet. Write for particulars. It will pay you. Address

LOS MOLINOS LAND CO., 305 WASHINGTON STREET, RED BLUFF, CALIFORNIA.

AT KENNEWICK ON THE COLUMBIA.

The ideal climate, winters warm and balmy.

Under the Great Northern Pacific Canal.

The choicest irrigated land in the West.

Own a ten acre fruit ranch and be independent.

Why work for others; be brave and do as thousands have done before you. These men have not made a mistake in coming here, many are independent.

We produce the earliest fruit, berries and grapes grown in the West.

It is all that we claim for it. Write to

KENNEWICK LAND CO., - - - KENNEWICK, WASHINGTON.

NAMPA, IDAHO

A railroad center of Southern Idaho, surrounded by 300,000 acres of magnificent farming and fruit lands. Only one-fourth of these lands are under cultivation. The UNITED STATES GOVERNMENT has appropriated \$11,000,000 to develop the water supply and work will begin in February this year. A beet sugar company has secured contracts on 6,000 acres of land and are now erecting a \$1,125,000 factory within the city limits and will handle the crop of 1906. We have just built an alfalfa meal plant to grind up the surplus hay and ship it away in sacks. A brewery company has just secured a site and will put up a \$30,000 plant. This will help the hop industry. A flour mill company is seeking a site and one will soon be located. You can not fail to see that all of these enterprises locating at the same time in a town of about 3,000 people will double and thruple its population in the next two or three years. We raise 5 to 8 tons of alfalfa per acre, 300 to 500 bushels of potatoes, two crops of timothy and clover, 20 to 60 bushels of wheat, 60 to 100 bushels of oats, 50 to 70 bushels of barley. All fruits raised to perfection. Write the NAMPA CHAMBER OF COMMERCE.

SNAKES

are not found in the SNAKE RIVER VALLEY, but here is found the most beautiful tract of agricultural land in the United States, and you do your raising, and have no failures of crops, that's irrigation. No cyclones or blizzards. This country needs live, wide-awake men, who wish a new home in the rapidly developing west, and offers cheap land, good church and school facilities, and a chance to make money to those who are willing to work. St. Anthony, the County seat of Fremont County, Idaho, is a bright and growing town in the very heart of a rich and growing richer country, and if you wish reliable information in regard to prices, soil, climate and our prospects, write any of the following firms: First National Bank; C. C. Moore Real Estate Co.; Wm. D. Yager Livery Co.; Murphy & Bartlett, Cafe; Commercial National Bank; C. H. Moon, Farmer; Chas. H. Heritage, Riverside Hotel; Miller Bros., Grain Elevator; Hale & Shell, General Merchandise; Chas. S. Watson, Druggist; Gray & Rose, Townsites; W. W. Youmans, Harness Store.

FREE Flower Seeds 1000 sorts, new and old, for FREE a g bed; also Park's New Floral Guide FREE. To your friends. Geo. W. Park, LaPark, Pa.

TREES THAT ARE CHEAP in price and of the best quality, free from disease and trusts to you. Complete information. Due bill good for 1000 catalogue free. Freight paid on \$100 Orders. FAIRBURY NURSERIES, Box L, Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES Small Fruits and Evergreens, Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEED CORN Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bushel. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinoian

Trees, Plants & Seeds THAT GROW Best quality. Good bearers. Low prices. Apple seeds 40¢; Plum and Cherry 12¢; Peach 4¢; all budded; Concord Grapes 20¢; Forest Tree Seeds 10¢; Upright 10¢; Upward 10¢. **GERMAN NURSERIES**, Carl Sondererger, Prop., Box 9, Beatrice, Neb.

HARDY EVERGREENS We grow them by the million. To prove they are healthy and vigorous we offer 12 Spruces and Pines 2 years old FREE to property owners. Mailing expense 6¢, whether sent or not. A postal will bring them. Catalog with colored plates of Hardy Plants etc. Write today. The Gardner Nursery Company, Box 740, Osage, Ia.

Iowa Produces the Best **SEED CORN**

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. **W. W. VANSANT & SONS**, Box 54, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and buy the dried product. You can get started in this profitable business for a small outlay. Send 2¢ stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo.

GOOD SEEDS CHEAP BEST EVER GROWN
A wonderful big catalog full of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds.

Big Lot of Extra Packages Free to Every Customer. Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

Seed Potatoes
To Grow Big Crops and best potatoes plant Our Red Rover-Grown Stock. They are unsurpassed in quality and early maturity. Our Stock is the largest and prices lowest. Our Big fine illustrated Catalog is FREE; gives prices and descriptions of every seed that grows. Send for it; a postal card will bring it to your door. Address, RATEKIN'S SEED HOUSE, Shenandoah, Iowa. (The largest Seed Corn Growers in the World.)

Try the New Majestic Tomato
The greatest vegetable novelty of the season. By all odds the largest, finest flavored and most productive in existence. Thousands of our customers have written us that it surpassed all others and produced 100 lbs. to 147 lbs. of fruit to the plant. Many reported single matatos, weighing 3 lbs. to 6 lbs. each. Just think what this kind of crop would mean on an acre of ground. The fruits are not coarse grained and poor like other large sorts, but are smooth, solid, have few seeds, and are unsurpassed in quality. Of fine shape and beautiful color. The first season the seed sold at 40¢ a packet of 100 seeds, but this season we have reduced price to 15 cents, and in addition to this we are offering \$100.00 in Cash prizes this year on them. Our large illustrated catalog describing the above and many other choice novelties will be sent free if you mention this paper. IOWA SEED CO., Des Moines, Iowa.

means of growing many trees besides a vast amount of garden vegetables.

Rice County. G. BOHRER.

Honey Locust—Celery.

EDITOR KANSAS FARMER:—Please answer the following questions in the KANSAS FARMER:

When and how should black locust and honey locust seeds be planted?

Will frost injure celery? S. J. Osborne County.

Locust seed if planted in the spring should first be scalded with hot water near the boiling point, but if planted in the fall no such preparation is necessary. Drill the seed in rows three to three and one-half feet apart; firm the soil above the seed by patting with back of hoe, or otherwise as may be convenient, leaving them at the depth of about one-half inch. Select such ground as would grow good corn and have it as free from weed seeds as possible.

Celery will stand a sharp frost, say a temperature of 22°, but should not be handled while frozen. A degree of cold ten to fifteen above zero will destroy it.

Fox Squirrels—Birds and Fruit.

EDITOR KANSAS FARMER:—We have plenty of what they call fox squirrels here. They are great on sweet corn when in the roasting-ear stage; they also help themselves to corn in the crib and take care of all the walnuts.

We also have many fruit-eating birds. They will not let a cherry or grape get ripe if they can help it. We have a good many rats here. I would rather feed rats on corn than feed birds on fruit. Now, if one is protected by law, why not protect all three? for one is as good as the other as far as usefulness is concerned. Our apples are nearly all wormy in spite of all the birds that are here. Do we not have a right to protect our crops, law or no law?

R. REICHERT.
McPherson County.

There are many firms now selling seeds of all kinds, but few of them produce all of the seeds they sell. W. W. Vansant & Sons of Farragut, Ia., is one firm that is an exception to the rule. This firm owns its own farms and produces every grain of seed-corn that it sells. The members of the firm personally oversee the sorting and preparation of all of their seed for shipment. The man who buys seed-corn of W. W. Vansant & Sons may rest assured that he will get the best seed that can be produced and that which has been selected with the utmost care.

Red Cedar.

Editor Kansas Farmer:—I have some evergreen seed (I think they are Arbor Vitae), a sample of which I enclose, and wish to know if they are likely to grow, also the time to plant and if they need to be put in the ground and let freeze. They seem to be hardy here and if I can successfully raise them from seed, they will prove a good thing for this bleak prairie.

Gray County. S. E. BARTON.

The seed sent are from the red cedar. Arbor Vitae would hardly grow successfully in your neighborhood. These seeds, if planted in the spring, would grow, but are slow to germinate. If soaked in a lye of sufficient strength to remove the outer resinous covering, the length of time necessary for sprout-

ing is about two months.

St. Jacobs Oil
for many, many years has cured and continues to cure

**RHEUMATISM
NEURALGIA
LUMBAGO
BACKACHE
SCIATICA
SPRAINS
BRUISES
BORENESS
STIFFNESS
FROST-BITES**

Price, 25c. and 50c.

Buy Your Trees Direct

WHOLESALE and save agents' commission of 40 per cent. **PRICES** We have direct connections with all points in Kansas, Missouri and the Southwest, and deliver all orders promptly and in good condition. Our stock is true to name and especially adapted to these localities. Write for wholesale price list. Wichita Nursery, Box B, Wichita, Kansas.

The Worlds Fair Prize Winning Corn Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tells how to raise Corn every year FREE. John D. Ziller, Hiawatha, Kansas. HE RAISES CORN.

World's Premium Seed Corn, HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand hubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

VICK'S JAMES SONS GARDEN AND FLORAL GUIDE FREE
Contains many new Premium Offers. You should know about Vick's Violet King and Mikado Aster, now offered for the first time. Send ten cents and receive a packet of Vick's Branching Aster in Six Colors, and coupon good for 10 cents on purchase of \$1.00 or over from 1906 Guide. Send for the Catalogue anyway; it's free.

JAMES VICK'S SONS
425 Main St. Rochester, N. Y.

For years we have sold the purest grass and clover seed to be found in this country. Our free catalogue contains a choice collection of vegetables and flower seed, with clear directions for cultivating each variety.

J. J. H. GREGORY & SON,
Marblehead, Mass.

GREGORY'S SEED CATALOGUE FOR 1906
High-Grade Flower Seeds.
20 Packages 10c.
KINDS. KINDS. KINDS.
Bat. Button, 10 Poppy, 18 Portulaca, 20
10-Weeks Stock, 10 Candytuft, 10 Marigold, 13
Eschscholtzia, 6 Aster, 16 Pansy, 10
Sweet Alyssum, 12 Zinnia, 12 Sweet Peas,
Sweet William, 8 Balsam, 12 Pinks, 10
Larkspur, 6 Petunia, 10
Nasturtium, 10 Callophrys, 8
Sweet Mignonette.

All of the above sent to any address, post-paid, for 10c. silver or six two-cent stamps. As a premium to introduce our seeds into every household, we will also send collection of fine beautiful bulbs FREE with Catalogue.

Somerville Nursery,
SOMERVILLE, MASS.

REAL SEED CORN
Graded or Crated ON APPROVAL
Your money's worth or your money back. How would you like to have some Real Seed Corn?—the real pedigree kind?—selected and graded so it will drop 90 per cent corn in an edge drop planter?—or shipped in the ear crated, on approval, guaranteed to suit you or your money back?
I grow it in my store. It is in a modern seed house and select it carefully. Besides seed corn I sell all kinds of seed—garden seed, seed potatoes, flower seed, clover seed and they are all tested and guaranteed.
Send for my catalog. It's free, and I will add samples of garden and flower seeds and 10 kinds of seed corn, if you care to put up the postage for them.
Write today.
HENRY FIELD, Seadsman,
Box 55, Shenandoah, Ia.
"The Ear Seed Corn Man"

HEALTHY TREES Honest in quality. Grafted Apple, Budded Peaches, Concord Grapes, \$2 per 100; Black Locust and Russ Mulberry, \$1 per 100. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.



SEED CORN

R IT ALWAYS PAYS to plant the BEST; Ratekin's "Pride of Nishna", yellow, "Iowa Silver Mine", and "Imperial" white; Three Best varieties in the World; Pure bred, thoroughly graded and always Grows. Planted by thousands of farmers everywhere for quarter of Century. Earliest big eared corn in existence; won more prizes than all other seeds. It's guaranteed to please you. Change your seed and grow bigger yields: it's the kind PAYS to PLANT. Our big fine illustrated Catalog of all Farm and Garden Seeds is FREE. Write for it today; a postal card will bring it to your door. Address:

RATEKIN'S SEED HOUSE,
Shenandoah, Iowa.
(The largest Corn Seed Growers in the World.)

TREE PROTECTORS

75 cents per 100
\$5 per 1,000

As valuable in summer against sun-scald, hot winds, etc., as they are in winter against cold and rabbits. Recommended by all leading Orchardists and Horticultural Societies. Send for samples and testimonials. Do not wait until rabbits and mice ruin your trees. Write us today. Wholesale Nursery Catalogue now ready. Send for copy. Agents wanted everywhere.

HART PIONEER NURSERIES
Box 17, FORT SCOTT, KANS.



The Children's Garden

Of course the children who read this advertisement are Flower Lovers, and wish a beautiful flower bed all their own. For the small sum of ONLY 10c we will send you a complete Flower Garden.

1 pkt. Pansy, over 40 colors and markings.
1 pkt. Pin's, all colors, single and double.
1 pkt. Bachelor Button, double, all colors.
1 pkt. Stocks, 10 weeks, double mixed.
1 pkt. Alyssum, sweet and fragrant.
1 pkt. Mignonette, sweet and fragrant.
1 pkt. Zinnia Elegans, finest double mixed.
7 Full Size Pockets, lithographed in natural colors with full cultural directions on each packet. All fresh new crop seed. This collection has been made up especially so as to secure the best effect for the least money, and will produce a gorgeous show of flowers the entire season.

35c VALUE FOR ONLY 10c A GENUINE BARGAIN

Made to introduce our seed to new customers, including FREE copy of our Grand New BOOK of Northern Grown Seeds, Plants, Bulbs, and Fruits, containing all the good things for the garden and farm worth growing at the right prices. All for One Dime, cash or stamps. Satisfaction guaranteed or money back. Send today.

L. L. MAY & CO.
St. Paul, Minn.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

ing would be shortened; otherwise some of the seed would not grow until the second year. If the seed be kept until fully dry, they lose their germinating power.

This tree is sometimes propagated from cuttings, taking new shoots growing from old wood. To get the very small trees growing from seed in the natural groves of cedar, plant them in nursery rows and cultivate until large enough to transplant where wanted permanently, would be best.

However raised, the small trees will need protection from the hot sun for at least the first year. Success in transplanting evergreens depends very much on keeping the roots always moist.

WALTER WELLHOUSE.

The Teneriffe Canary grass is being introduced this year by the Iowa Seed Co., of Des Moines, Iowa, and feeling sure that our readers will be interested in this crop, we have made arrangements with them to mail a small sample of the seed to you free, if you mention this paper in your request, and they will also send with same directions for cultivating, and a copy of their large illustrated catalogue which describes many other choice novelties in farm, vegetable and flower seeds. Do not get this confused with other varieties of Phalaris which produce a similar grain but are inferior in productiveness and quality. If you are going to try it, insist on having the true Teneriffe Canary grass-seed.

A Big Tomato.

Last year when Mr. J. R. Lawrence, the noted horticulturist and experimenter of Massachusetts, reported that he had grown one of the Majestic Tomatoes which weighed 5 1/2 pounds, we thought that surely the limit had been reached, as before the introduction of this grand new variety 2 1/2 to 3 pounds was considered the largest weight possible. During the past season \$100 in cash prizes was offered and all of the five prize-winners grew specimens weighing over 6 pounds each. Mrs. Amelia Cronin, of Akron, Iowa, has a



scheme for growing large specimens, which proved very successful and will undoubtedly be of interest to some of our readers. She says: "Enclosed find my report which is signed also by two witnesses who saw the big tomato weighed. I planted the Majestic tomato to seed in February in a box of soil in the house, and when about two inches high, transplanted to another box. At proper season I set them out on a very rich piece of ground where a straw pile had been burned and the ashes raked in. The plants were watered every night and when about 18 inches high, I cut the tips off and by allowing only 2 or 3 fruits to ripen on some of the plants, it threw all the strength to these fruits. The largest specimen weighed 7 pounds 7 ounces, and there were several which weighed over 5 pounds each." Some plants of the Majestic tomato have produced 145 to 160 pounds of fruit. Just think what that kind of a crop would mean on an acre of land. They are of such large size and so productive that they are attracting general attention. This new variety is being introduced by the Iowa Seed Company of Des Moines, Iowa, who are again offering \$100 in cash prizes on them and we hope our readers will compete. Better write them to-day for a copy of their large illustrated catalogue of garden and farm seeds, which will be sent free if you mention this paper.

Premium Offer.

J. D. Ziller, Hiawatha, Kans., writes the Kansas Farmer as follows: "I have determined to make it an object for every progressive farmer to plant pure-bred seed-corn. Every purchaser of two bushels or more of any one of my four varieties of pure-bred seed-corn will be entitled to enter the contest, and to the one who has the largest yield of corn from one acre of ground, I will give one new Victor Corn Planter Drill and Check-rower complete, value \$45; ground to be measured and corn to be weighed. All orders for corn and entries must be in before March 1, 1906."

Please mention the Kansas Farmer.

Great Rose Offer by One of Our Advertisers.
It is not often that a seed firm makes such a liberal offer as that of the A. A. Berry Seed Co., Clarinda, Iowa, found on page ... of our paper. They are sending to our readers a beautiful rose bush, a packet of vegetable seed and their fine seed book, all for 10 cents, which covers the cost of packing and postage. This firm is one of the big seed firms of the country and handles a very extensive line of field, garden and flower seeds. They are perfectly reliable and will make good. They are seed-growers. Mr. Berry, who has always been a farmer, still lives on a farm—and some of their warehouses are located on their extensive farms. Send to-day for their great offer.

SEED CORN--REID'S YELLOW DENT AND BOONE COUNTY WHITE
This is not elevator corn, but real seed corn. Hand selected, tested and thoroughly graded. Good as you would select yourself. Sent on approval. Sample and catalogue free. Low Gap Seed Corn Farm, Arbela, Mo.

ALFALFA SEED

MCBETH & KINNISON

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices
GARDEN CITY, KANSAS

ALFALFA SEED

Kansas Grown. Non-Irrigated.

From grower to consumer. Write for prices.

MEADE, KANSAS

SEEDS

SEEDS FIELD, GARDEN, FLOWER

EVERYTHING for the Farmer or Gardener

Planet Jr., Garden Tools, Seed Sowers, Bale Ties, Onion Sets, Large Stock Clover, Timothy, Alfalfa, Millet, Cane, Kaffir Corn, Potatoes, Blue Grass, Orchard Grass. Write for FREE catalogue.

MISSOURI SEED CO., 1427 ST. LOUIS AVE., KANSAS CITY, MO.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

DELICIOUS RADISHES with BARGAIN LIST FREE

A Big Package of Splendid Radish Seed, Enough to Grow Bushels of Luscious Radishes, Free

Everybody loves a tender, juicy radish. Send to-day and get free, our Great Bargain Seed Book and enough Radish Seed to keep you in luscious radishes all summer long. Or, if you prefer, we will send you sufficient grass seed to grow 5 tons of rich hay grass on your farm this summer and our Bargain Catalog, free for the asking. Our Bargain Catalog is a wonderful book, brim full of rare bargains at bargain prices of all kinds of Onion, Sweet Corn, Cucumber, Radishes, Lettuce, Tomatoes, etc., etc., and also a wonderful array of pedigree farm seeds as Oats, Wheat, Corn, Barley, Potatoes, Timothy, Grasses, Clovers, Alfalfa, etc., etc.

Simply send us this notice, sign your name and address and the free package of Radish or Grass Seed as you select, together with this new interesting Bargain Catalog with all of its bargain offers, all of its bargain surprises in flowers, vegetables and farm seeds, all the valuable information showing our wonderfully low prices, all will be sent you by return mail postpaid.

If you enclose 4c, we add a package of Cosmos—the most beautiful fashionable annual flower.

JOHN A. SALZER SEED CO., Lock Box 56, La Crosse, Wis.

FACTORY FARM IMPLEMENTS PRICES

WE SELL THEM DIRECT TO YOU Do Not Pay Retail Prices

BE YOUR OWN DEALER AND GET OUR CATALOG. IT SHOWS YOU HOW TO SAVE MONEY

	\$9.98	PLOW SHARES	
Our Departure" is the best Tongueless Cultivator on the market. Direct hitch, spring steel, nice to bolt on. \$1.50 draft bars. Guaranteed satisfactory. Complete \$9.98	\$1.50	Fitted Plow Shares for all the standard makes. Best quality, solid cast and crucible steel, nicely to bolt on. \$1.50 draft bars. Guaranteed \$2.00 each. See Catalog	\$12.10
Only 98c	\$17.95	LISTER SHARES Fitted Lister Shares, solid cast and crucible steel; put them on your self, they are guaranteed to fit; a great saving; our factory price only. 98c	86x tooth steel 28oz. lever Harrow, complete with evener; best grade; price only \$8.95
			\$8.30

923 West 9th St. Kember-Paxton Mercantile Co. Kansas City, Missouri.

POULTRY BREEDERS' DIRECTORY

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

BUFF COCHINS—25 rich colored, heavy feathered cockerels and pullets, half price. Eggs, \$2 per 15; \$3.50 per 30. Imperial Pekin drakes \$1 each. H. A. Thomas, Scranton, Kas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Wichita, Kans.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kans.

MY R. I. REDS won seven prizes on eight entries at Kansas City. Circular. H. C. Kellerman, 3516 Swart Ave., Kansas City, Mo.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kans.

WHITE WYANDOTTE COCKERELS for sale; from prize-winning birds. Orders for eggs taken now. \$1.50 per 15. Mrs. John W. Smith, Lawrence, Kans.

PURE-BRED Barred Plymouth Rocks at reasonable prices. J. A. Sawhill, Edgerton, Kans.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kans.

FOR SALE—Young M. B. Turkey toms from high-scoring prize-winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns. S. Spangled Hamburgs, S. C. Black Minors \$1 per \$15. Viral Valley, Kinsley, Kans.

ELM GROVE POULTRY FARM—Light Brahmans; cockerels \$2. Eggs, \$1.25 per 12. Miss Ella Burdick, Route 8, Emporia, Kans.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kans.

MAMMOTH BRONZE GOBLERS—Extra nice large young toms, \$5 each. Buy one to improve your flock. C. E. Durand Plantation, Hutchinson, Kansas.

GFM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

BLACK LANGSHANS—My entire flock for sale cheap. Prize-winners. Eggs, \$1 per 15. O. S. Allen, 1629 W. 5th, Topeka, Kans.

CHOICE B.P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes; \$1 per 15. W. H. Turkeys, \$1.50 per 9. Emenden geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kans.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD BBFD SINGLE COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First Street, Newton, Kans.

S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Ave., Topeka, Kans.

BARBED AND WHITE PLYMOUTH ROCK EGGS, \$2 per 15, \$5 per 45. Hawkins and Bradley strains, scoring 93% to 94%. Mr. and Mrs. Chris Bearman, Ottawa, Kans.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kans.

BLACK LANGSHAN EGGS—From birds scoring from 93% to 95%. \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

FOR SALE—Choice S. C. B. Leghorn cockerels, \$1 each. J. N. Sheldon, Route 1, McPherson, Kans.

FOR SALE—S. C. B. Leghorn cockerels, pure-bred, farm raised, "vigorous." from high scoring stock; \$1 each, f. o. b. Address T. D. Marshall, Modoc, Kans.

BARRED ROCKS EXCLUSIVELY—Leffel strain. Large, heavy boned, fine, clear; Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards John D. Ziller, Hiawatha, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue Ribbons at Great Bend, Emporia, Wichita; 15 for \$2. W. C. Watt, Walton, Kans.

S. C. B. LEGHORNS—Closing out sale of my entire flock of hens, cocks and cockerels. A bargain come quick. J. A. Kauffman, Abilene, Kansas.

LOOK HERE—TRY me on the big-boned Black Langshans, scoring from 90 to 95%. Charles Leeper, Harper, Kans.

WHITE WYANDOTTE COCKERELS, (Stay White) \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kans.

MAMMOTH BRONZE TURKEYS, Silver Laced Wyandotte cockerels for sale. Address Francis Long, Madison, Kans.

AMERICA'S CENTRAL POULTRY PLANT can furnish strictly pure Black Buff, Black and White Langshans, Buff Leghorns and Light Brahmams. Write early and get your choice. J. A. Lovette, Prop., Mullinville, Kans.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kans.

SINGLE COMB WHITE LEGHORN cockerels \$1 each; two or more 50 cents each. Fine white pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin, fine, pure and vigorous; hens, cockerels, cocks and pullets, \$1 each; two or more, 50 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Conterville, Ill.

FOR SALE—150 B. P. R. and W. P. R. cockerels and pullets; strong, vigorous, cockerels, \$2 to \$5; pullets, \$1 to \$2.50. Exhibition cockerels matter of correspondence. Mr. and Mrs. Chris Bearman, Ottawa, Kans.

BROWN CHINA GEESE, Indian Runner Ducks also Barred Rock Cockerels. Prize winners at State Poultry Show. O. C. Schrader, Meriden, Kansas.

The Poultry Yard

A Few Figures on Poultry and Eggs.

We give the figures for four years as found in the Year Book of the Department of Agriculture for 1904. Going through these figures and getting an average, we find the average wholesale price for eggs in Chicago, for the year 1900 was 14½ cents; for 1901, 16 cents; for 1902, 20 cents; for 1903, 17 cents; for 1904, 20½ cents. With the single exception of 1903, every year has shown a decided increase in the average price, and 1904 made up for this by showing a better average than any previous year.

Probably the most potent factor in keeping up the price of summer eggs is the increased capacity of cold storage houses, where thousands upon thousands of cases of eggs are stored from March until winter. Competition among speculators keeps prices above what they would otherwise be. It is claimed that cold storage keeps the price of eggs down in winter. This may be true to a certain extent, but as a large portion of the hens of the country do not lay in winter the price of fresh eggs in winter is bound to be high enough always. The cold storage speculators buy when eggs are cheapest and when the price would be very low if they were not in the market. They secure to those people who would never get eggs in winter a price at least five cents in excess of the price they would receive under the old order of things. On the whole, cold storage is beneficial and has been the means of making the production of eggs more profitable.

Another reason for increasing prices is that the supply does not keep pace with the demand. There has been no glut in the egg market of late years. A largely increasing population creates a larger demand for eggs. And then, too, the people who live in cities and towns understand that eggs are cheaper than meat, and use them largely in substitute for that commodity. And the people who produce the eggs use more of them. Every condition which has made the price of eggs and poultry as meat high in the past, promises to continue long in the future, making the prospects for poultry and eggs better than ever before.—F. W. Brooke in The Gleaner.

Poultry Notes.

N. J. SHEPHERD, ELDON, MO.

A good layer ought never to be sacrificed as long as she can be used for breeding-purposes, and the selection of such hens as breeders would soon result in the improvement of any stock.

Exercise such as a good forage ground affords a flock of poultry is a great health promoter, and the lack of forage ground, causing the feeding of the flock to excess, soon has a tendency to bring on many ailments among the flock.

Ducks often commence to lay when six months old and the eggs from such ducks will hatch; and while it is often the case that good results are obtained from young breeding ducks, yet it is best to use drakes that are one year old with them, allowing one drake to every five or six ducks.

The great trouble in raising young turkeys is in the first few weeks of their lives. As a rule they are overfed while young with food not adapted to them, and not kept warm and dry, but allowed to get wet and chilled. Keep them in a pen or small yard with good shelter convenient so as to be protected from chills; feed regularly, but be careful not to overfeed.

The objection to using corn as an exclusive feed for poultry is that it is deficient in lime, and contains an excess of carbon, which promotes the laying on of fat, which is not favorable to egg-production. Corn can nearly always be fed at night to advantage, and especially during the winter; but one other kind of grain or food should be given in the morning and at noon.

One ounce of crude carbolic acid dissolved in a quart of water is not expensive and can be used freely. A teaspoonful of this solution put in every gallon of the drinking water will prevent many diseases due to contamination of the water and especially so when the sick fowls are compelled to drink from the same source as the others. It is an excellent remedy for roup, and when used in the whitewash or sprinkled in the pens it is a good disinfectant.

It takes a certain amount of food to keep the animal machine running and the profit comes in according to the supply of food permitted over and

POULTRY BREEDERS' DIRECTORY

LOW PRICES on bone-cutters, clover cutters & rodders, grit mortars and poultry supplies. Free Supply Catalogue. Address manufacturer, Humphrey, Yale Street, Joliet, Ill.

MAMMOTH BRONZE TURKEYS
FOR SALE—Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kans.

LIGHT BRAHMAS
More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver. - Blue Mound, Kansas

C. W. LEIGHTON
Breeder of Black and White Langshans
A few more cockerels for sale including winner of 4th prize at State Show Jan. 1906. Eggs, \$1.50 per 15; from 3 high-scoring pens.

Barred Plymouth Rocks
Exclusively—"Superior Winter Laying Strain," noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. EVANS, Route 4, Fort Scott, Kans.

BLACK LANGSHANS
Bred by John Shank, New Cambria, Kansas
Stock and eggs for sale. Eggs, \$2 per 15.

R. C. Rhode Island Reds
Winner at the 1906 Kansas State Poultry Show of 1 and 2 prizes on cock, cockerel and pen, 1, 2 and 4 on hen, and 4 on pullet. Twenty-five cockerels for sale; also six choice White Plymouth Rock cockerels. Write for prices. A. D. WILLEMS, Inman, Kans.

Fancy Black Langshans
G. C. MILLER, Breeder.
Stock for sale. Fifteen eggs for \$2. Address 546 Missouri St., Lawrence, Kans.

AMERICA'S CENTRAL
POULTRY PLANT
Can furnish strictly pure-blood Buff, Black and White Langshans, Buff Orpingtons, Buff Leghorns, Bronze turkeys and Toulouse Geese. Write quick. J. A. LOVETT, Prop., Route 1, Mullinville, Kans

S. C. RHODE ISLAND REDS
Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet; 2, 4, 5 cockrel. Young cockerels for sale. Eggs, \$1.50 to \$2.50 for 15, from high-scoring pens. R. B. Steele, Sta. B., Topeka, Kans.

FOR SALE.
15 varieties pure-bred chickens, ducks, geese and turkeys. Fowls and eggs at low prices. Write for catalogue. H. H. HINIKER, Mankato, Kans., R. R. 4.

ACME CHAMPIONS Bronze turkeys, Show Champion, Topeka and St. Joseph, winning ten 1sts, three 2nds, two 3rd prizes; only 7 birds entered. Barred Rocks, 1st, 3d hen, Topeka, 93%; 92%, 5th cock 90%; 4th pen St. Joseph, 2d hen 92%; 3d cock 91, own 2d cockerel, 93%. Eggs, \$3 per 15; \$5 per 30. M. B. Turkey eggs, \$1 each. Cockerels for sale. Pullet breeders specialty. Mrs. W. B. Popham, R. F. D., Chillicothe, Mo.

SAVE YOUR CHICKS.
Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR,
Glendale Park, Hutchinson, Kans.

At Topeka 1906
Our Buff P. Rocks won all shape and color prizes awarded. Our first prize pullet scored 94 (cut 1 for injured eye). Our winning Houdans, White Plymouth Rocks, and White Plymouth Rocks, and White Wyandottes, are the same quality. We have very fine S. C. B. Leghorns. Judge Helmich cut our White Rock cock ¾ of a point for color of entire bird. Eggs from pens we hatch from \$2 per 15; \$8 per 100. Standard Poultry Yards, Abilene, Kans.

INCUBATOR EGGS
From high grade White Rocks and White Wyandottes.
\$3.00 for 50, \$5.00 per 100
SEND FOR CIRCULAR.
W. L. BATES, Topeka, Kans.

White Plymouth Rocks
EXCLUSIVELY.

Good for Eggs, Good to Eat, and Good to Look at

W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96%, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepare expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B., Topeka, Kansas

VESPER'S POULTRY YARDS.
Hedgewood Place. Ind. Phone 6513.
TOPEKA, KANSAS

Breeders of

Barred Plymouth Rocks.

Exhibition stock a specialty. 200 pullets and cockerels for sale. Orders booked for eggs. \$2 per 15 from breeding pens; others \$5 per 100.

Our Yards Are Headed by Winners as Follows:
1st cockerel, Topeka poultry show.
3d pullet, Topeka poultry show.
1st pullet, Kansas City poultry show.
1st cockerel, Parsons poultry show.
1st and 5th cock, 1905.

POULTRY BREEDERS' DIRECTORY

Light Brahma Chickens
Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

PARK VIEW FARM
WHITE PLYMOUTH ROCK EGGS for sitting—fine stock; farm raised. Price, \$1 for 15; special price by the hundred. Shipped by express, carefully packed, anywhere. Mrs. O. E. Walker, Roule 8, Topeka, Kans.

Buff Orpingtons and Buff Leghorns
Cockerels for sale. Eggs in season, \$2 per 15, and infertile eggs replaced. Also breeder of squabs. Write for further information and price list to

W. H. MAXWELL,
1220 Quincy Street, Topeka, Kansas

Rose and Single Comb White Leghorns and White Wyandottes IN ALL THEIR PURITY

Unsurpassed in every respect for beauty, utility and winter layers. At State show the largest in the United States, just held at Topeka Kans., 26 prizes were awarded me. Write for my catalogue, giving prizes on stock and eggs.

W. S. YOUNG, McPherson, Kans.
When writing mention this paper.

YOUNG STOCK.

A fine lot of White Plymouth Rock cockerels and pullets and White Wyandotte cockerels from our prize-winning strains for sale at attractive prices.

W. L. BATES, Topeka, Kansas.

LIFE PRODUCERS
SUCCESSFUL INCUBATORS.

LIFE PRESERVERS
SUCCESSFUL BROODERS.

The only machines that rival the mother hen. Incubator and Poultry Catalogue FREE. Booklet, "Proper Care and Feeding Small Chicks, Ducks and Turkeys," 10c. 50c poultry paper one year, 10c.

DES MOINES INCUBATOR COMPANY, Department 83, Des Moines, Iowa.

Geo. Ertel Co., Quincy, Ill.

is FREE for the asking. Drop us a postal today and learn the difference between the Ertel machine and the cheap kind. The Book tells facts you ought to know if you are thinking of an incubator investment. There's money in chicken raising—big profits in ducks—large returns on incubator hatched turkeys. Let us start you right. Don't waste eggs, oil, and time on a poor machine. Get the benefit of our 39 years experience. Profit by the successful methods of others as described in our book. Write for it today.

Geo. Ertel Co., Quincy, Ill.

DUFF'S
POULTRY

Barred Plymouth Rocks, White Plymouth Rocks, Buff Leghorns, Light Brahmams, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, Brown Leghorns.

First-class Standard Stock of Superior Quality. Stock For Sale. Eggs in Season. Write Your Wants. Circular Free.

A. H. DUFF, Larned, Kans.

POULTRY FEEDING AND FATTENING

A handbook for poultry keepers on the standard and improved methods of feeding and marketing all kinds of poultry.

The subject of feeding and fattening poultry is prepared largely from the side of the best practice and experience here and abroad, although the underlying science of feeding is explained as fully as possible. The subject covers all branches, including chickens, broilers, capons, turkeys and waterfowl; how to feed under various conditions and for different purposes. The whole subject of capons and caponizing is treated in detail. A great mass of practical information and experience not readily obtainable elsewhere is given, with full and explicit directions for fattening and preparing for market. The broad scope of the book is shown in the following

TABLE OF CONTENTS

Thrifty Growth, Expert Chicken Feeding, Broiler Raising, Nutrition for Layers, Special Foods, To Finish and Dress Capons, The Art of Poultry Fattening, Lessons from Foreign Experts, American Fattening Methods, At Killing Time, Preparing for Market, Marketing Turkeys and Waterfowl, Finish and Shaping.

Profusely illustrated, 160 pages, 5x7 1/2 inches cloth. Price 50 cents postpaid.

Kansas Farmer Company
Topeka, Kansas

SCOTCH COLLIES.

SCOTCH COLLIES—Scotch Collie pups from registered stock for sale. Emporia, Kennels



The Louse Question

When your animals rub incessantly at this season of the year, look out for lice. This is especially true of calves and colts. To meet this condition Dr. Hess (M.D., D.V.S.) formulated the famous Instant Louse Killer, which kills lice on stock and poultry.

INSTANT LOUSE KILLER

Kills ticks on sheep. It, being a powder, can be applied in zero weather. Do not wait for warm weather; do not let the tick eat up your profits; kill him on the spot with Instant Louse Killer. Put up in round cans with perforated top, full pound 25 cts. Sold on a positive written guarantee. Be sure of the word "Instant" on the can; there are 25 imitators.

1 lb. 25c { Except in Canada
3 lbs. 60c { and extreme
West and South.

If your dealer cannot supply you we will forward 1 lb. by mail or express, prepaid, for 25 cents.

Manufactured by

DR. HESS & CLARK
Ashland, Ohio.



BIG Profits in Poultry
If you raise it right, let us help you "get right" with a new 1906-pattern Standard Cyphers Incubator

Guaranteed to hatch more and larger chicks than any other. Easy to operate. Complete Catalog and Poultry Guide, 228 pages (8x11) free if you mention this paper and send names of 2 neighbors who keep poultry. Write nearest office.

CYPHERS INCUBATOR CO., Buffalo, Boston, Chicago, New York, Kansas City or San Francisco.

40 DAYS FREE TRIAL
IN YOUR OWN HOME
100-EGG GREAT WESTERN INCUBATOR
Most Perfect Incubator Made.
GUARANTEED FOR 10 YEARS
Shipped anywhere on 40 days FREE TRIAL. Test it thoroughly. If it does not hatch as it should—if not just as represented and satisfactory in every respect—you may return it at our expense. We assume all the risk. Large Catalog FREE.

GREAT WESTERN INCUBATOR CO., 923 Liberty St., Kansas City, Mo.

Take Your Own Time. Old Trusty Incubator

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and so good chicks—why it is so easy to operate—why it is so economical. It's sold on 40, 60 or 90 days trial, freight prepaid. Write to us.

M. M. Johnson Co., Clay Center, Neb.

WHY HENS DON'T LAY

When well cared for and well fed, it is because they need waking up to start egg production. This comes naturally in the spring—the natural mating season. In winter you have to give something to stimulate them. Without this they are stupid, lazy and dull.

Mix SECURITY POULTRY FOOD in their rations. It will give them life and activity and shortly your hens will be laying. Don't wonder why they don't lay, but get Security Poultry Food from our dealer in your town and feed it.

WE WILL REFUND YOUR MONEY
If you are not entirely satisfied.

SECURITY STOCK FOOD CO., Minneapolis, Minn.

above the amount necessary to keep them in good condition. On the other hand, there is a point where the right kind of food may be fed unprofitably and an overplus of fat produced; fowls so fed become inactive, and the eggs will not hatch well, neither will chicks come out with sufficient vigor to make them easily brought up.

Poultry Show Notes.

W. H. Maxwell of Topeka had a very fine exhibit of Buff Orpingtons and Buff Leghorns at the show. The birds were among the best and he was awarded many premiums. Mr. Maxwell is also an extensive breeder of squabs.

The display of Brown China Geese by O. C. Sechrist of Meriden, Kansas, was one of the interesting features of the State Poultry Show. "When we commenced raising them," said Mr. Sechrist, "we, like most farmers, were afraid we would not like them, but we soon found that they had been slandered. They are not vicious or quarrelsome with other poultry. They are easy to raise and lay more eggs than any other variety. Their flesh is not oily or soft, but is firm and gamey in flavor. In my opinion no other goose is as handsome in the show room.

The White Holland turkeys exhibited by Miss Lillian Schaal of Lexington, Mo., attracted a large crowd of spectators at all times during the show. Several of her birds exhibited were prize-winners at the St. Louis World's Fair.

R. F. Young, of McPherson, is one of those pleasant gentlemen who help always to make the poultry show a successful as well as an enjoyable event. He is a breeder of White Leghorns and had the largest individual poultry exhibit at the meeting. He always succeeds in carrying away his share of ribbons.

Mrs. W. P. Popham of Chillicothe, Mo., carried away many prizes during the show. Her exhibit of Acme strain of Bronze turkeys was very fine, and she impresses every one whom she meets with the fact that she understands the poultry business thoroughly.

A Free Book Worth Having.

There is a free book called "How to Save One Half" sent out by the H. M. Sheer Co., Quincy, Ill., that tells exactly how to construct high-grade incubators and brooders from the very first mark of the pencil up to the adjusting of the regulator preparatory to setting the eggs. Every detail of construction is shown clearly in a series of over eighty half-tone photos arranged in the order of each consecutive operation.

This book is especially valuable to "Beginners" and tells them how to avoid mistakes and failures in hatching eggs artificially by selecting reliable apparatus. It is a condensed encyclopedia for every poultryman, big, little, amateur, or the "old hand."

This book also explains the life-work of Mr. Sheer, the well known incubator specialist, inventor of the Acme Automatic Lamps, and Acme Automatic Regulators and Thermostat. He has spent eighteen years in perfecting these and other incubator and brooder appliances, until he is now a recognized authority in this country and abroad.

Incubator users, provoked by the cranky actions of their regulators on lamps, should not consign their machines to the scrap heap. Write for this catalogue and see how many a man has saved his incubator and got big hatches by following Mr. Sheer's advice.

At the Louisiana Purchase Exposition the jury of awards, in giving the highest honors to the Cyphers Incubator, called it a "perfect incubator." Even before this jury had an opportunity to pass upon its merits the Cyphers was considered the standard after which



others might pattern. With such a reputation in the minds of the people its future seemed assured without any effort on the part of the manufacturers toward improvement. Much surprise was felt and a great deal of curiosity aroused when the manufacturers announced that, as the result of their past experience and their inventive genius, the Cyphers incubator for 1906 would contain no less than 18 distinct points of improvement over that of 1905. These have all been kept secret until the manufacturers were ready to place the 1906 model on the market. Now they are all explained in the new catalogue which is a book of 222 pages and every one of them of value. Your local dealer can show you these 18 points of improvement but it is better to have the catalogue also. It is free to readers of the Kansas Farmer.

DON'T SEND EAST for your Single Comb Brown Leghorns. In four shows this season these shows have had highest scoring bird in the show. Scores as high as 95% by Owen and Atherton and 94% by Rhodes. Stock for sale. Eggs \$1 for 13; \$6 for 100. CHAS. C. SMITH, Manhattan, Kans.

\$7.00 Freight Prepaid, Buys the Best 120 EGG Incubator Ever Made.
\$4.50 Buys the Best 100-Chick Brooder.
Both Incubator and Brooder, if ordered together, cost but \$11.00. Double cases all over; best copper tank; hot water; self regulating; satisfaction guaranteed. Our book, "Hatching Facts," tells all about it. Mailed free. Write for it.
Belle City Incubator Company, Box 18, Racine, Wisconsin.

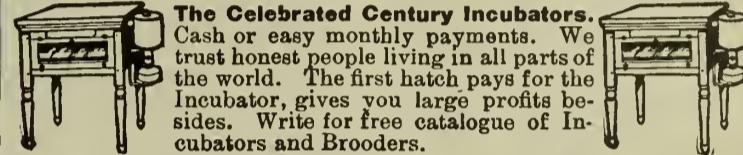
A Remarkable Incubator Book

A man who has devoted 24 years to perfecting incubators has written a book. It tells all that he learned by hundreds of tests with different incubators in his hatching. It tells in a fascinating way just the facts you should know before buying. We send the book free because the man who writes it is the man who has made the Racine Incubators and Brooders. He shows them as they are today, and tells why you should have one. No one can read this book without wanting this man's machine. Write today. We Pay the Freight.

Racine Hatcher Co. Box 88, Racine, Wis.

We have Warehouses at Detroit, Mich., Buffalo, N. Y., Kansas City, Mo., and St. Paul, Minn.

ON CREDIT.



CENTURY MFG. CO.

EAST ST. LOUIS, ILL.

The Best CHICK MOTHER on Earth and YOU can TRY IT 60 Days FREE

We don't ask you to believe anything. We ask you to let us prove what we say.

Let us send you a Sure Hatch Incubator, at our own risk, freight prepaid.

Use it two months in your own home. If you don't find it all we claim, send it back at our expense.

Could we do more than that?

Yes, we do more. We guarantee every Sure Hatch Incubator for 60 days, 6 months; or for 6 years, if you prefer.

They are always on trial. We stand ready to make good any fault of ours at any time—now or ten years from now.

We know what we are talking about when we say Sure Hatch Incubators are the best.

For there are over 80,000 in use right now. And they are hatching all hatching eggs put into them.

Sure Hatch means a chicken from every good egg.

The success of the Sure Hatch sells more of them each year than are sold of any other make.

Sure Hatch prices run from \$7.50 to \$17.50—capacity 75 to 200 eggs to a hatch.

Our big FREE catalogue explains why we can give you the biggest Incubator value ever offered.

Send for it today.

It contains facts worth money to every poultry raiser. The information it includes will put dollars in your pocket.

It tells the best ways to hatch, feed, raise and market poultry.

Its 100 pages are filled with illustrations, Poultry House plans, and figures that mean a lot to you.

A post card with your name and address brings it.

Remember, no ordinary mail order house can offer you an incubator like the Sure Hatch at any price.

No dealer can sell you anything as good, no matter how much he charges.

Write us today.

SURE HATCH INCUBATOR CO.
Station E 42 Clay Center, Neb.
Dept. E 3 Indianapolis, Ind.

Hatch - All Incubators

They save worry. Help you make more money. Strong, durable. Even heat, pure air, simple to run. Beginners get big hatches. Write us for proofs and learn to add to your income. Handsome catalog free.

HEBON INCUBATOR CO., Box 18, Hebron, Neb.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

Topeka Supply House

7th and Quincy, Topeka, Kansas.

MACHINE OIL

\$3.50 A BARREL

You will find it a better machine oil than anything you have been buying for 35 cents to 45 cents per gallon. Premium Oil is a natural oil, greenish black in color. There is no made oil that is superior to Premium Oil for engines, shafting, shops, elevators, thrashing machines and farm machinery. It will not GUM, has good body, is not affected by hot and cold weather as most oils are. If a farmer, you say you won't need as much as a barrel. Get your neighbor to take half of it. But remember \$3.50 for a 50-gallon barrel, and the empty barrel is worth at least one dollar; gives you oil at less than 6 cents per gallon at your railroad station. If within 300 miles in Kansas freight will not be over 75 cents per barrel. Sample sent on request.

T. C. DAVIS, Benedict, Kans.

Benedict, Kans., August 26, 1905.

I have this day sold my interest in K. C. Dailey & Co. to T. C. Davis, who will hereafter conduct the business in his name. Signed, K. C. DAILEY.

The American Boy MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year) 1.00
Kansas Farmer, 1 year 1.00

Total \$2.00
Both 1 year for \$1.50

Address,
KANSAS FARMER CO.,
Topeka, Kansas.

FIFTH TERM JONES' NATIONAL SCHOOL OF Auctiooneering and Oratory

Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President.

Asthma
Climates wear out. Smokes, Sprays and "Specifics" relieve only temporarily; they cannot cure. Our CONSTITUTIONAL treatment, founded 1883, permanently eliminates the CAUSE of Asthma and Hay Fever, so that nothing brings back the old symptoms or attacks. Write for HORN L., containing reports of many illustrative cases that have STAYED CURED for years. Mailed FREE. Write P. HAROLD HAYES, Buffalo, N. Y.

TUBULAR Starts Fortune

If you had a gold mine would you waste half the gold? Dairies are surer than gold mines, yet farmers without separators only half skim their milk. Tubular butter is worth 25 to 35 cents. Cream is worth one cent fed to stock. Are you wasting cream?

Sharples TUBULAR CREAM SEPARATORS**Like a Crowbar**

Tubulars are regular crowbars—get right under the trouble. Get the cream—raise the quantity of butter—start a fortune for the owner. Write for catalog U-165.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
TOKTO, CAN. CHICAGO, ILL.

Dairy Interests**Alfalfa and Other Soiling Crops.**

The Pennsylvania State College reports on experiments with several soiling crops the following summary:

Of the various crops grown in the tests made during three years, sorghum and cow-peas produced the largest yield of green substance per acre. As a green forage, this crop was most satisfactory; the cows ate it well and, everything considered, it proved a most satisfactory soiling crop, particularly, as it can be grown after a crop of rye or of oats and peas has been removed.

Alfalfa produced the greatest weight of air-dry substance per acre. As a green forage, this crop was entirely satisfactory, and is recommended wherever alfalfa can be grown successfully.

Alfalfa produced the largest weight of protein per acre of any crop, even larger than the combined crops of red ripper cow-peas and peas and oats, which were grown on one plat during the season.

Corn, as a single crop, ranks second in the production of air-dry matter per acre. If, however, sorghum, cow-peas and rye are combined, as these two were grown on the same land during the same season, they would rank first; alfalfa, second; corn, third.

Sorghum and cow-peas, as a single crop, was entirely satisfactory. This combination gave a large yield of nitrogenous food which the cows consumed with much relish. From a feeder's standpoint, few objections could be made to this crop.

Canada field-peas and oats make most satisfactory soiling crops. They are among the earliest crops to ripen and are consumed by cattle with relish. If larger amounts are grown than are required in soiling, this crop may be readily cured into a fine quality of hay which will make a good substitute for, and in many instances will equal, prime clover hay. A satisfactory crop of cow-peas may be grown on the same land after this crop has been removed.

While flat peas produce large yields of nitrogenous soiling crops, yet they are not recommended; first, on account of the difficulty in establishing the crop; second, the crop is not relished by cattle; third, there appears to be

cost of a ration might be reduced to a minimum by producing on the farm a considerable proportion of the protein required, thus diminishing the expenditure for protein in the form of concentrates.

This test includes not only the production of the various crops, both as to quantity and quality, but the feeding of them to dairy cattle and their effect on milk and butter production as well. This test may be considered a continuation of similar tests that were made during the seasons of 1902 and 1903. The results of the former tests have already been published, that of 1902 being described in Bulletin No. 65, and that of 1903 in the Annual Report for 1903-1904. The test described in these pages was made with the following crops, which were fed to five cows:

Flat peas; peas and oats (three sowings); peas and barley; clover silage; cow-peas and milo maize; black cow-peas; red ripper cow-peas.

Some of the objects in making these tests were to determine, as far as possible:

Yield of green forage per acre of the different crops; yield of dry matter per acre; yield of protein per acre; length of time from sowing to feeding; amount of forage produced per acre during the season; effect of the different crops upon the milk-production; amount of various crops the cows would consume daily; area of each crop that would be required to give a stated number of cows sufficient green forage.

THE PREPARATION OF LAND AND SEEDING.

With the exception of the flat peas and clover silage, the forage crops were sown at intervals from May 5 to June 25. These crops were sown on comparatively small plats, but with an ordinary field grain drill. The land in all cases was plowed and harrowed sufficiently to make a good seed-bed. Such preparation was given as would have been considered good preparation for ordinary spring grain. In brief, the crops were sown under what would have been called good field condition.

May 5: A plat was sown to Canada field peas and oats. The peas were sown first and drilled in at the rate of seven pecks per acre. When sowing the peas the drill was set as deep as possible. After sowing the peas the oats were sown with the same drill, the drill being set to sow more shallow. The oats were sown shallow enough so that very few of the peas were disturbed when sowing the oats. In order to secure good germination it is desirable to sow the peas deep, unless the seeding can be made early in the spring.

May 16: A second sowing of peas and oats was made in the same manner as described under date of May 5.

May 21: The last seeding of peas and oats was made as were the former seedlings, and peas and barley were sown in the same manner as peas and oats described under date of May 5.

June 11: A plat was sown to cow-peas and milo maize. Two sowings were made. When sowing the milo maize the drill was set to sow four pecks of wheat per acre, and when sowing the cow-peas the drill was set to sow seven pecks per acre.

June 25: A plat was sown to black cow-peas at the rate of two bushels per acre.

TOTAL YIELDS.

Table I gives the date of sowing, the date of harvesting and yield per acre of both green substance and air-dry matter of the different soiling crops tested in 1904.

TABLE I—YIELDS OF SOILING CROPS.

Crop	Date of Sowing	Date of Harvesting	Yield per acre.	
			Green Substance Pounds.	Air-Dry Substance Pounds.
Flat peas.....	June 17-June 28	10,004	1861	
Peas and oats.....	May 5	27,671	3929	
Peas and oats.....	May 16	18,137	2938	
Peas and oats.....	May 21	22,773	3120	
Peas and barley.....	May 21	19,415	3436	
Flat peas.....	Aug. 3-Aug. 12	11,782	2344	
Clover silage.....				
Cow-peas and milo maize.....	June 11-29	18,083	3707	
Black cow-peas.....	June 25	18,251	3705	
Red ripper cow-peas.....	June 25	11,117	2590	

From this table it will be readily seen that peas and oats give the largest yield of green substance and also of air-dry matter. While it is true that the two cuttings of flat peas produced a considerably greater yield of air-dry matter than either of the other crops, yet it should be remembered that the cow-peas followed the peas and oats, and the combined yield of these two would represent the yield per acre during the season, as in the case in the two cuttings of the flat peas. This subject, however, is given fuller discussion in another paragraph.

Peas and oats gave the largest production of a single cutting, this being nearly two tons (2,029 lbs.) of air-dry

**100% ON YOUR MONEY
EVERY YEAR
FOR TWENTY YEARS**

This is the marvelously good investment that more than 700,000 users have actually found the **DE LAVAL CREAM SEPARATOR** to be.

With the average number of cows a **DE LAVAL** machine saves and earns its whole cost the first year, which it continues to do yearly for its established life of fully twenty years more to come.

There surely isn't another such investment, either on the farm or off it, open to any one having cream to separate. Why delay making it?

As for the first cost, if you have the ready cash of course there is a fair discount for it, but if not any reputable buyer may secure a **DE LAVAL** machine on such liberal terms that the machine is actually free of cost for it will earn its cost and more while you are paying for it.

Send at once for catalogue and full particulars.

THE DE LAVAL SEPARATOR COMP'Y

Randolph & Canal Sts.,

CHICAGO.

109-113 Youville Square

MONTREAL

1213 Filbert Street.

PHILADELPHIA. 74 CORTLANDT STREET,

75 & 77 York street,

TORONTO.

9 & 11 Drumm Street.

SAN FRANCISCO.

NEW YORK.

14 & 16 Princes Street

WINNIPEG.

Cream is Cash**The largest exclusive Cream Butter Factory in the World****NO WAITING****NO DELAY****NO RISK****NO UNCERTAINTY****NO ANXIETY.**

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business.

Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in **Cash**.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

**BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.****Save 20% to 50% By buying a DAVIS Separator**

It comes direct from the factory

Factory prices. No middlemen's profits. Investigate our fair selling plan.

It's the low-down separator (just bell high) that has a three-piece bowl that can never get out of balance. In all the separator world there is nothing to equal the Davis for convenience, for nice, close skimming, for easy running and easy cleaning. Don't buy without having our money-saving Catalog No. 125. It's free. Write for it to-day.

Davis Cream Separator Co.,

54-6 North Clinton Street,

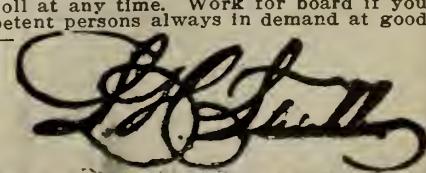
CHICAGO, ILLINOIS.

**Topeka Business College**

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free.

DEPARTMENTS:

Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship



TOPEKA BUSINESS COLLEGE, Topeka, Kans.

substance per acre. While the flat peas produced relatively a larger amount of air-dry substance from the total weight of green substance than the other crops, yet, for various reasons, this crop is not so desirable as a forage crop as some of the leguminous annuals. As the flat pea is a perennial, it required more or less cultivation each year to keep the land free from grass and weeds. It is also inclined to grow in broad rows or to occupy a large part of the land, and, consequently, cultivation is difficult. These, together with the difficulty of securing good germination, are sufficient objections to make this crop unpopular with many farmers. While the flat pea as a protein-producing crop has much to recommend it, yet the reasons just stated and the fact that it is not particularly relished by dairy cattle are sufficient to at least place this crop among the questionable forage crops for soiling purposes.

The following table (Table 2) gives the weight of green substance, the weight of air-dry substance and the weight of protein per acre produced by the various crops for the three years during which these tests were made. When tests for more than one year have been made, averages only are given:

TABLE 2—YIELDS OF SOILING CROPS.

Crop.	Number of Years	Weight per Acre—Pounds		
		Green Substance	Air-Dry Substance	Protein
Alfalfa.....	1	25,426	6555	1145.30
Clover.....	1	9,072	2676	
Clover and timothy.....	1	6,878	2319	260.89
Corn.....	1	22,360	5456	405.79
Cow-peas (Whippoorwill).....	2	17,554	3402	447.98
Cow-peas (black).....	1	18,251	3705	467.00
Cow-peas (red ripper).....	1	11,117	2590	474.00
Cow-peas and milo maize.....	1	18,083	3707	451.90
Flat peas.....	2	17,700	3701	574.50
Peas and oats (8 trials).....	3	18,623	2862	310.86
Peas and barley.....	1	19,415	3436	530.00
Rape.....	2	29,055	4071	509.55
Rye.....	1	11,930	3406	272.00
Soy-beans.....	2	11,723	2505	317.36
Sorghum.....	1	27,279	4337	360.51
Sorghum and cow-peas.....	2	31,018	5439	397.39

From the above table it will be seen that alfalfa produced the greatest yield of air-dry substance per acre and also the largest yield of protein. When we consider, however, that cow-peas grew on the same land that produced the peas and oats and peas and barley, we see that about the same yield of green substance was produced per acre by the two crops that was produced by the three cuttings of alfalfa, and that the two crops produced almost as much protein.

Who Stole the Butter?

A farmer owned a herd of milk cows that yielded him an average of 400 pounds (about 200 quarts) of milk per day. It was average milk, being 4 per cent butter-fat. In other words, the 400 pounds of milk his cows gave him daily contained 16 pounds of butter-fat. This farmer had had his milk tested, and knew it contained that amount of butter-fat. He churned every three days and knew the cream from three days' milk should yield 48 pounds of unsalted butter. But it didn't. Instead of getting 48 pounds, he rarely got more than 25 or 26.

Who was getting that cream?

His wife thought that somebody might be stealing it, so he put a lock on the milk-house door. That didn't help matters any.

He was puzzled.

He had a first-class milk-house, used the best system of deep settling, and couldn't see where that cream went. He let his milk stand until almost sour before he skimmed it, thinking it might cream better. But that didn't mend matters any—simply spoiled the skimmed milk for calf feed. Up to that time he had thought he had a perfect system of skimming. But he knew that 48 pounds of butter-fat was there, because he had had his milk tested; but he could not make as much butter as he should.

He grew suspicious of his cans.

It seemed to him that something was wrong with his cans. He asked his hardware dealer about it. This was the answer he got: "Look down your calves throats." He asked the hardware man what he meant. The hardware man replied, "You have been robbing yourself—heen feeding about half your butter-fat in your skimmed milk. Your cans are good enough, as cans go—but cans don't do the business. They depend altogether on the force of gravity to do the skimming, and gravity is not strong enough. Half of the butter-fat remains tangled up in the skimmed milk, and it takes a force a whole lot stronger than gravity to get it out."

"What will do it?" the farmer asked. "Centrifugal force, as applied in the Sharpless Tubular Cream Separator," was the reply.

This hardware dealer was an agent for the Sharpless Tubular Cream Separator, and loaned this farmer a Tubular for a free trial. The farmer took the Tubular home, used it three days, churned 47½ pounds of unsalted butter from the cream it extracted out of three days' milk and sent a check to the hardware dealer in payment for the machine. He had been robbing himself, and did not know it. He had been making six-cent veal out of butter-fat the Tubular would have enabled him to get 25 to 35 cents a pound for, when he could have made just as good veal out of oil-meal costing but two cents a pound. The kindness of the Tu-

bular agent in lending him a Tubular for a free trial enabled him to find the loss and stop it—making a gain for him of about 8 pounds of butter per day.

All Tubular agents are just as accommodating. Any one of them will lend you a Tubular for a free trial. If you do not know of any Tubular agent near you, we suggest that you write to The Sharpless Separator Co., of West Chester, Pa. If you will ask for catalog No. 165 they will not only send you the catalog, but refer you to their nearest local agent. The Tubular Cream Separator is a machine we can, and are glad to, heartily recommend.

Mexico-St. Louis Special.

The United States and Mexico, North America's sister republics, destined in the estimation of all to be closely allied in the stupendous accomplishments of the future, have now been brought within intimate touch by the installation of a semi-weekly fast train service, giving a sixty-hour schedule between St. Louis and the City of Mexico. Each Tuesday and Friday, at 9 a.m., a through vestibuled train leaves the St. Louis Union Station over the Iron Mountain Route, and at 8:30 p.m. two days later will land its passengers in the ancient capital of the Montezumas—the present metropolis and seat of government of modern Mexico. Unquestionably this new departure means much for both Nations concerned. It is a shortening of the links in the chain of fraternal amity, born of a better understanding of their mutual interests, and will bring about a still closer social and commercial relationship. Credit is due the several through lines

TABLE 2—YIELDS OF SOILING CROPS.

Weight per Acre—Pounds

Crop.	Number of Years	Green Substance	Air-Dry Substance	Protein
Alfalfa.....	1	25,426	6555	1145.30
Clover.....	1	9,072	2676	
Clover and timothy.....	1	6,878	2319	260.89
Corn.....	1	22,360	5456	405.79
Cow-peas (Whippoorwill).....	2	17,554	3402	447.98
Cow-peas (black).....	1	18,251	3705	467.00
Cow-peas (red ripper).....	1	11,117	2590	474.00
Cow-peas and milo maize.....	1	18,083	3707	451.90
Flat peas.....	2	17,700	3701	574.50
Peas and oats (8 trials).....	3	18,623	2862	310.86
Peas and barley.....	1	19,415	3436	530.00
Rape.....	2	29,055	4071	509.55
Rye.....	1	11,930	3406	272.00
Soy-beans.....	2	11,723	2505	317.36
Sorghum.....	1	27,279	4337	360.51
Sorghum and cow-peas.....	2	31,018	5439	397.39

which have cooperated in this laudable enterprise—the Iron Mountain Route, the Texas & Pacific and the International & Great Northern (all Gould roads) on this side of the Rio Grande, and the National Lines of Mexico beyond Laredo—though beyond a shadow of doubt they will reap a rich harvest from the rush of tourists and commercial interests to profit by this opportunity of speedy and comfortable travel, a delightful change from the customary slow time, frequent changes at junction points, and the tedious layovers that formerly robbed travel of its pleasure. The train will comprise through compartment, observation and standard drawing-room sleeping cars and dining car, affording every comfort and luxury of modern railway service.

American Wire Fence.

There are many kinds of wire fence, but the requisites are first, that it shall be strong to hold up against and withstand all extreme strains, and then flexibility, to take all ordinary shocks, give and come back to its original shape, so as not to stay sagged or bent.

These two very important qualities are found in the superlative degree in fence made by the American Steel & Wire Co. Their fences are not only constructed from extra long fibre steel wire, strong and flexible, but this is galvanized heavily to protect it from the weather and prevent rusting out.

This concern operates thirty big plants and all make every known kind of wire, from the stiffest, required in piano manufacture, to the finest—all almost silky—fibre which is woven into wire cloth. With such extensive facilities, and opportunity to observe their products under all sorts of conditions, it is not surprising that they should be able to produce wire surpassing in quality all other kinds.

And the enormous quantity they make enables them to reduce the cost to a point where they can sell the very best wire at prices very much lower than other concerns have to ask.

Steel is the very best material for fences because it is the strongest substance made.

And American fence—wire made by the American Steel & Wire Co.—is so constructed that you can adjust it to any unevenness in your ground and maintain uniformity throughout. Its lateral wires are big, continuous pieces, very tough and durable; while the upright, or stay wires, are hinged upon the lateral wires so that there can be no giving way. This makes a perfect square mesh fence.

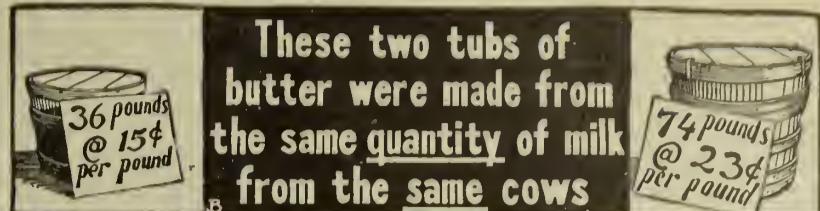
American fence wire is annealed as it is drawn, which makes it stronger than ordinary fence wire. American fence is sold through dealers to give buyers the benefit of personal attention; but if your dealer does not keep it, put off buying until you can write the makers and get a catalogue. That will enable them to see that your interests are properly looked after.

Address the American Steel & Wire Co. at any of their branch headquarters—Chicago, New York, Denver or San Francisco.

Farm Scales a Necessity.

There has been a good deal written lately about scales on the farm. The question is asked, are they a necessity? Is a farmer justified in owning a scale of his own rather than depending on the public scale in town? To my mind there is no more profitable investment a farmer could make than to buy a small platform scale for his own use, or join with other farmers in buying one for neighborhood use.

The day of guessting on farm deals is



How was it done? Here's the story in the words of a plain, honest, hard-working farmer and his wife.

RAVMOND, NEBR., JUNE 6, 1905.
We had a water separator, and from twelve cows we made 36 lbs. of butter. The next week we used a No. 6 U. S. Separator and made 74 lbs. from the same cows in the same pasture without any extra feed. We made \$10.45 the first week after using the machine. We are very much pleased with it, and could not do without it now.

JOHN NEYLON,
MRS. NEYLON.

Are you using any gravity method to skim your milk? If you are,

U. S. Cream Separator

will do for you what it did for the Neylons. Think what that means—a considerable daily saving in the time and work of handling your milk—from $\frac{1}{2}$ to $\frac{1}{4}$ more butter than you are now getting, and better butter, too, that brings a higher price. You can't afford to put off looking into this matter another day—write us now for a free catalogue, which explains just what you want to know.

VERMONT FARM MACHINE CO.
Bellows Falls, Vt.

Eighteen Centrally Located Distributing Warehouses throughout the United States and Canada

Cleveland Cream Separator

Direct to You
30 Days Approval Test

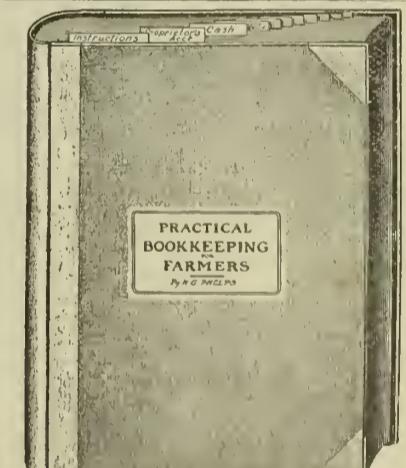
Easy Running:—Cleveland Separator this isn't an empty claim. The whole thing is summed up in an honest, easy to prove reason. The Cleveland is the only ball-bearing separator made.

Easy Cleaning:—The Cleveland has fewest parts and skimming device is made of aluminum. Investigate. You will find this metal is non-corrosive, non-poisonous, milk cannot stick to it and there is no coating to wear off. We prove these things.

Long Life:—The Cleveland has the fewest parts of any separator made and gets results at the slowest speed. Parts can't wear out that are not there. The Cleveland is a guaranteed perfect skimmer.

How We Sell:—To you from our own factory. The only manufacturers making a high grade separator and selling it at a fair, square price and a fair, square plan. No money in advance. No note to sign. No fuss of any kind. The catalog tells you. Write for it.

THE CLEVELAND CREAM SEPARATOR CO.
Dept. B, 34 Michigan Ave., N. W.
Cleveland, Ohio.



The farmer's guide to success in farming. 200 pages 10x13 inches. 20 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of a whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free.

Send us ten 2-cent stamps and we will mail you our latest book—a 50-page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$3.00.

Address H. G. Phelps & Co., Bozeman, Mont.



Use a Manure-Spreader.

A 48-page book entitled "Practical Experience with Barnyard Manure," is now available. It gives some excellent ideas. In fact, the book is full of good common sense. We can not take the space to tell all of the good things that the book contains, but here are some facts that are contained in it.

Series of experiments show that where manure was spread on corn ground as the farmer ordinarily spreads it, the value of the crop was \$20 per acre. Another experiment was made using the same amount of manure spread by the new, up-to-date method, and the value of the crop was \$24.80 per acre, a gain of \$4 per acre. Another experiment was made on a clover-field, and the gain was \$4.50 per acre. Another gain of \$8 per acre is reported on a clover- and timothy-field.

The book explains the new method fully. It tells why such a large gain is made. It explains the matter so explicitly that the reader will see the point at once. It contains articles from those who have made a study of this subject for eighteen years.

The book does not contain an advertisement of any kind. It is printed on good book paper and is a valuable publication. It should be in the hands of every reader of this paper. We consider the book of such value to our readers that we have made arrangements with the publishers to mail a copy to the readers of the KANSAS FARMER, providing they will write at once, and mention this paper in their letter. Send four cents to pay postage. Address the Smith Manufacturing Co., 158 East Harrison St., Chicago, Ill., and ask for a copy of the book entitled "Practical Experience with Barnyard Manures."

Gypsy and Brown Tail Moths.

The pest of Gypsy and Brown Tail Moths has caused much annoyance in New England and has made it necessary to adopt strenuous measures to combat it.

The spraying outfit shown in the cut is made especially to meet the demand for a sure means of killing the moth and is put out by the Olds Gasoline Engine Works of Lansing, Mich.

They started out with the theory that the practical and correct way to dispose of the Gypsy and Brown Tail Moth is by spraying, and they believe in a mist instead of a solid stream. From the experience which they had in Northern New York a few years ago,

watha Yellow Dent corn grown and developed by John D. Ziller, of Lawndale Seed Farm, Hiawatha, Brown County, Kansas. At least he has been growing and showing this variety for about 20 years past and has a long string of first prizes, won at important western fairs and shows, to show for the faith there is in him. This is the corn with which Mr. Ziller won the silver medal at the World's Fair at St. Louis, and the first prize and \$20 in gold for best bushel of corn at the same place. Mr. Ziller will be glad to send you his seed catalogue, which contains mention of many other varieties, if you will drop him a line and say you saw this in the KANSAS FARMER.

Wealth Producers.

To the man or woman studying over ways and means of earning money on small capital, poultry-raising offers greater attractions than almost any other field.

It takes the merest fraction of an hour each day if one has a reliable incubator, and the cost of the standard machine, "The Sure Hatch," made by the Sure Hatch Incubator Company, of Clay Center, Nebraska, is very reasonable.

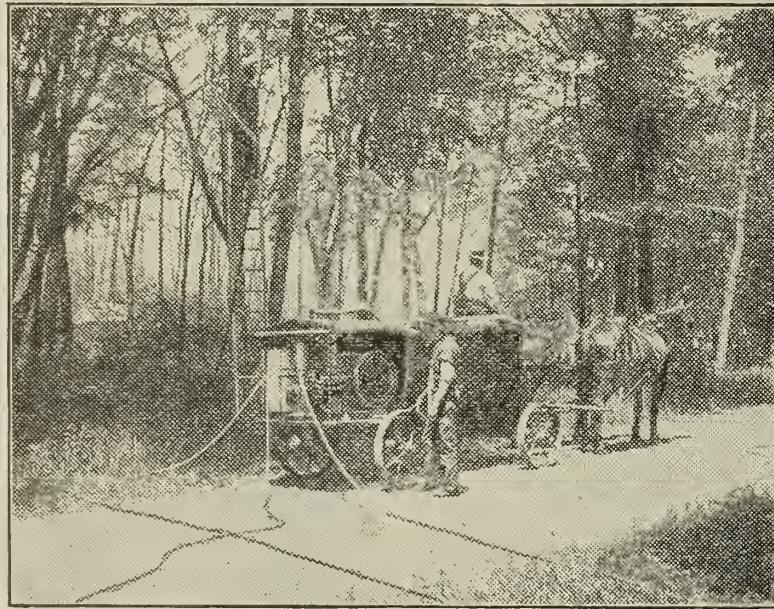
They sell their 100-egg machine (which by the way has an actual capacity of 120 eggs) for \$10.00, in most localities, and not only prepay the freight on it but they will ship it on sixty days trial. We have carried the advertising of the Sure Hatch Incubator Company for a number of years and hundreds of our readers have purchased their machines.

The 1906 Incubator has been greatly improved. It has a patent Safety Lamp that is entirely free from the drawbacks of ordinary incubator lamps. The burner is made with a special flame slot that does not spread the flame, while the one-piece large flue is a decided advantage over the ordinary kind that often opens at the seams and cause serious trouble.

Being surrounded by a water jacket, every bit of the lamp's heat is utilized, making the Sure Hatch Safety Lamp a great oil-saver.

Both the tank and pipes of the hot-water heating system are made of heavy copper and there are 138 square inches of heating surface.

Important improvements have been made in the ventilation system, which keeps the eggs constantly in warm, fresh air, the foul air escaping through vents at the bottom of the egg-chamber.



they have come to the conclusion that the finer the spray the more readily it adheres to the leaf, and also that the pump must carry at least 125 pounds pressure to obtain the best results from spraying. In this way this outfit uses a very small amount of liquid, but the air is full of it like a fog, and it adheres to both sides of the leaves and makes a thorough job of it.

Five main lines of hose can be connected with these sprayers and then tributaries from these, so that it is possible to use fifteen nozzles. In this way a large territory is covered and a very small amount of the poison used.

One of these outfits was sold to General Lawrence of Medford, Mass. He has been using it for several weeks and reports that it is the best thing he has ever seen for the purpose. A few days ago he bought a second outfit and he says he prefers it to all others. He has put out more money probably, trying to suppress the ravages of the Gypsy and Brown Tail Moth than any other man in the State.

Superintendent A. H. Kirkland of Boston was sufficiently interested in this spraying outfit to go to Madford to see it in operation and states he is greatly pleased with the way it works. He saw it in operation with six lines of hose and sixteen nozzles and it did thorough and practical work.

The outfit is a compact affair and weighs comparatively little. With the pump operating at normal speed there is sufficient liquid in the tank to supply twelve nozzles for one hour or one nozzle for twelve hours.

It is adapted for use in orchards as well as in parks and has prospects of being very widely used by fruit men throughout the United States.

A Good Kansas Corn.

For many years it has been the opinion of thinking men that what Kansas needed more than any other seed was a good, well acclimated corn. Not good old corn merely; that is easily obtained, but a distinctively Kansas corn that would be in every way suited to our conditions and that would, at the same time, be a good yielder. This very desirable state of things seems now in a fair way to be realized in the Hia-

Our readers will be interested in the new Sure Hatch Catalogue and Poultry Manual which can be obtained by addressing a postal card to the Sure Hatch Incubator Co., Clay Center, Neb., or East Washington St., Indianapolis, Ind. Those wishing to engage in poultry raising for profit will find it a safe guide.

A Free Book on Soil Cultivation.

There are few subjects upon which the farmers of America have been given as little information as on the proper cultivation of the soil.

For this reason, we are particularly glad to call the attention of our readers to a book that has been issued by the Fuller & Johnson Mfg. Co., the well-known farm-implement makers, located at Madison, Wisconsin.

This company has been making plows, harrows, cultivators and a general line of implements for over a quarter of a century and now, they have set forth in a clear, practical, understandable way, the valuable information they have accumulated in all these years. For instance, let us put a few questions to our readers, which this book answers intelligently:

What is the best time to turn under a grass manure crop? What are the advantages of early spring plowing? Under what circumstances should fall plowing be done? What is the best method of treating a field which is overrun with weeds and insects? When should a light, sandy soil be plowed? When should a heavy, soggy soil be plowed? How should sod-land be plowed? What style of plows are best for the different soils? When should sub-soiling be practiced? Why is deep harrowing necessary after plowing? When should a disk harrow be used? Under what conditions may liming be practiced with profit? What degree of temperature should the soil be to insure good germination? What is the best depth at which to plant corn? Why should the crop be cultivated after a rain? How many tons of water will a 60 bushel crop of corn need? How many tons of water will a 25 bushel crop of wheat need? As a rule, which is best, deep or shallow cultivation? Why must the soil be in better tilth when transplanting than when planting seeds? What are the most essential

James R. Young's**ON and ON BROOD SOW SALE**

AT

Richards, Missouri, March, 7, '06**50 Head of the very Elite 50**

Fifteen by the Old King Chief Perfection 2, 10 by Perfection E. L., the great sow sire; 4 by the lamented Mo. Black Perfection; 2 by the sweepstakes winner, Chief Sunshine 2d; 2 by Chief Sunshine, half sister to Chief Perfection 2d; 3 by Sunshine of Maple Grove; 3 by Black Sunshine, and others by Kemp's Perfection, Perfect Trouble, etc., all bred to On & On the great.

Three extra boar pigs will be sold. The catalogue gives details. You want it, and a postal card will bring it.

John D. Snyder or the other auctioneers will carefully handle orders for those who can not attend. A cordial invitation is extended to all to attend whether contemplating purchases or not. Free entertainment at Richards Hotels.

James R. Young, Richards, Mo.

Auctioneers: W. D. Ross, H. C. Correll, D. P. McCracken, John D. Snyder, Jas. W. Sparks, Lafe Burger.

**DISPERSION SALE
—OF HORSES—**

**AT SOUTH OMAHA ON
MONDAY, FEB. 26, '06**

The Maple Grove Stud of Percheron and French Coach Horses . . .

50 — HEAD — 50

**25
Stallions
25**



**25
Mares
25**

All coming 3 and 4 years old. These are the colts and fillies that were under 2 years old at my last sale in 1904. They are mostly all black, strong-boned, stylish colts, one of the choicest lot of Percherons ever offered to the public at auction in this country.

**MARK M. COAD,
Fremont, Nebraska.**

Catalogues may be had of John S. Cooper, South Omaha, or Mark M. Coad, Fremont, Nebraska.

elements of tobacco land? How many feet of nursery must one plan for each acre to be set to tobacco? How much cabbage seed is needed to grow enough plants for an acre? What is the best method of planting sweet potatoes?

It is given away absolutely free. We advise everyone to write for a copy promptly, as the books are in great demand already. The Fuller & Johnson factory is at Madison, Wis.

Growth of a Great Horse Remedy.

No better illustration can be given of great things coming from small beginnings than Kendall's Spavin Cure. It was compounded and used in a small way about 35 years ago by a veterinarian named B. J. Kendall in the then obscure village of Enosburg Falls, Vt. Since then the name of Dr. Kendall and "Kendall's Spavin Cure" have gone to all parts of the world. The merits, and the merits alone, of the remedy have done it.

While Dr. Kendall was practicing as a veterinarian he wrote a little book entitled "A Treatise on the Horse and His Diseases." It is safe to say that no more popular work on this subject has ever been produced down to the present day. It was used originally by the doctor in his practice and handed out to the horsemen with whom he came in personal contact. It is said that now upwards of 12,000,000 of these little books have been published and gratuitously distributed.

The cures of spavin, curb, ringbone, splint, wire-cuts, sores, etc., and the expense and labor saved to horse-owners by Kendall's Spavin Cure are beyond comprehension. For the greater part of these 35 years Kendall's Spavin Cure has been the chief, and with thousands of horsemen the only, remedy used. It must be remembered that it is not confined to this country. It is decidedly a world remedy. With the little book mentioned above to guide, and with Kendall's Spavin Cure at hand to treat promptly any case of sprain, wound, lameness, incipient bone growth, etc., the ordinary horse-owner is well fortified against all the common ailments to which horse flesh is liable. We believe it to be unquestionably a more efficient remedy and adapted to the cure of more of the ailments to which the horse is liable than any other now on the market.

Bargains in Seeds.

The immense harvest of 1905 has enabled the John A. Salzer Seed Company of La Crosse, Wis., to offer unheard-of bargains in seeds. After supplying the usual channels of trade, they have enough seeds of all kinds remaining to supply thousands of farmers with their entire season's supply at a remarkable saving.

The "Salzer Bargain Seed Book" contains a complete list of these seeds and is sent free of cost to any one on request. The list includes not only all varieties of vegetable and flower seeds, but barley, clover, flax, spelt, timothy, new wheats and grasses of all kinds. They are all of the famous "Northern Grown Pedigree Seeds" that made Salzer famous throughout the world, and have a record for immense yields. Those desirous of obtaining the best in seeds, and the greatest number of seeds for the least expenditure, should not delay writing for the "Bargain Book"—a fine to the John A. Salzer Seed Co., Lock Box 56, La Crosse, Wis., will bring it by return mail.

Selecting the Seed Potatoes.

It is not too early to begin to think about seed potatoes. Even though you do not order now, it is a good plan to have cast around and made up your mind where your seed is to come from. To those of our readers who are not already regular patrons of the house, we suggest the Griswold Seed Co., of Lincoln, Neb. It is unquestionably one of the best concerns in the country from which to buy seed potatoes. A large part of their stock is grown for them in the Red River Valley, North Dakota, a region famed for its potatoes and which gives the hardiness which insures a wonderful development in less rigorous climates. While doing a general seed business, they might be called seed potato specialists. Kherson oats, alfalfa, seed corn, rye grass, millet, sorghum, and garden seeds are a few other things specially in their line. They publish a large, well illustrated catalogue, which they send free to any one writing for it. We think it a good seed catalogue to have.

The McMillan Fur & Wool Co., of Minneapolis, have mailed us their new circular, which we have on file for reference. This house has been established some twenty-eight years and on account of their extensive business, which minimizes the proportion of fixed expenses, are in a position to pay high prices. They make a specialty of receiving goods through shipments, and shippers find returns very satisfactory. Mention the KANSAS FARMER and write them for free catalogue and price list.

The seed house of L. L. May & Co., St. Paul, Minn., are sending out a very fine catalogue for 1906. It is very complete and nicely illustrated. Those of our readers who desire to secure Northern-grown seeds of all kinds would do well to address this firm. They also list garden tools, sprayers, dusters, incubators and brooders in addition to fruit-trees, shrubs, and all kinds of garden, field- and flower-seeds.

THE MARKETS.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo.

Monday, February 19, 1906.

Cattle prices reached the high note of the winter the middle of last week, but prices eased off after that on account of a heavy run Thursday and closed the week with practically no change from close of previous week. Buyers were erratic most of last week, their orders showing that packers feared a drop in receipts, but after they had gotten stocked up pretty well on Wednesday they settled down to their usual indifference, when they do not need cattle very bad. Their early activity, however, showed that the



THE MOST IMPORTANT PUBLIC SALE OF REGISTERED HEREFORD CATTLE



THAT WILL BE HELD THIS YEAR TAKES PLACE AT THE
LIVE STOCK SALE PAVILION

Kansas City, Mo., Wednesday, Feb. 28 and Thursday, March 1, 1906

BEGINNING EACH DAY AT 1:00 O'CLOCK SHARP.

THE SALE IS BEING MADE BY THE FOLLOWING WELL-KNOWN HEREFORD BREEDERS:

C. A. STANNARD, Emporia, Kans.
C. B. STOW, Hamburg, Iowa.
MISS LOU GOODWIN, Blue Rapids, Kans.
JAS. A. GLESON, Odessa, Mo.
T. C. SAWYER, Lexington, Mo.
D. D. AKIN, Sterling, Kans.
J. A. YARSON, Everest, Kans.
GEO. E. BAKER, Maryville, Mo.

GUDGELL & SIMPSON, Independence, Mo.
J. W. LENOX, Independence, Mo.
CLARENCE DEAN, New Market, Mo.
R. C. WILSON, Belton, Mo.
STEELE BROS., Richland, Kans.
W. J. BONEY & SON, Cairo, Mo.
MRS. K. W. CROSS, Emporia, Kans.
JAS. WREN, Keytesville, Mo.



100 HEAD will be sold, about equally divided between bulls and cows. This will be the ranchman's opportunity as well as the breeder's and farmer's. Every animal is thoroughly guaranteed.

If you would like to have a catalogue giving the breeding of each animal to be sold, write _____.

SECRETARY C. R. THOMAS, 225 West 12th Street, Kansas City, Mo.

under whose management the sale will be conducted.



meat trade is in good shape, and that they are able to dispose of large quantities of product.

The cattle supply to-day is 12,000 head, prices steady to 10c lower. Steer prices are about steady with last Monday, but considerable below the high time of the week Wednesday. Cows and heifers are 15@25 higher than last Monday, stockers and feeders about steady, veals higher. The best steers sold last week at the high point at \$5.60@5.85 odd head at \$6, bulk of steers \$4.75@5.40, prices 10@20c below these figures to-day, with a top of \$5.50. Top heifers bring around \$5, cows \$4.40, bulk of she stuff \$3.25@4.25, medium and common cows \$2.25@3, bulls \$2.75@4, veals \$6@7.50, feeders \$4@4.85, extra choice ones \$4.90@5.20, stockers \$3.35@4.50. Country buyers are taking hold in a hesitating way, influenced by the uncertain movements of the fat-steer market, but show an inclination to buy.

Hogs gained a quarter last week, closing at about the best point, but the market had a few downs along with the ups. Supply is moderate to-day, 8,000 head, prices strong to 5c higher, top \$6.25 for two loads, bulk of sales \$6.05@6.15. Present prices are around \$1.30 higher than a year ago, and at that time the market was declining. Receipts are moderate, 52,000 last week, slightly more than at this time last February.

Mutton prices held firm last week, lambs declined 10@20c. Run to-day is 10,000 head, prices strong on sheep, lambs weak. There are signs of smaller receipts, and some traders believe lambs will sell better shortly. Top lambs barely bring \$7 now, good ones selling at \$6.55@6.80, yearlings \$5.70@6.10, wethers \$5.50@5.80, ewes \$4.25@5.25. Some thin lambs have gone to the country lately at \$5.85@6.25. J. A. RICKART.

South St. Joseph Live Stock Market.

February 19, 1906.

There was a slight increase in the number of cattle in sight at the five points to-day as compared with last Monday and there was an easier feeling to the trade in consequence. The local market was well supplied with good styles of export and dressed beef steers and the market did not show any particular change, demand being strong for all classes and prices about steady with the close of last week. Cows and heifers were only in nominal supply considering the number of cattle on sale and the market was steady to strong. Bulls and veals were unchanged and good stock and feeding steers were in active demand and steady. Following are current quotations: Native steers \$4@6.10; Texas and Westerns, \$3.75@5.50; cows and heifers \$1.65@4.80; bulls and stags, \$2 @4.75; veals, \$3.50@7.50; yearlings and calves, \$2.75@3.90; stockers and feeders, \$3@4.60.

There was further shrinkage in the number of hogs in sight at principal markets and values responded by advancing sharply, but some of the gain was lost before the close. The general trade, however, ruled 5@10c higher than average trade of Saturday, prices ranging from \$5.90@6.20, with the bulk selling at \$6.07@6.15. These figures have only been exceeded once since May, 1903, and general conditions continue to be favorable to the country. Good hogs are scarce and offerings are pretty much on the mixed order that tall down to an unfinished light end, which indicates shortage of supplies in the country. However, conservative dealers are not following advances too closely and thereby enlarge their profits on all advances. Demand here is very strong at the higher range and packers could use many more than are coming.

The trade in sheep and lambs to-day held about steady, receipts being rather small and quality fair to good. Lambs are quotable at \$6.60@7.15, yearlings, \$5.75@6.50; wethers, \$5.50@6.10, and ewes at \$4.75@5.25.

WARRICK.

The Right Road

from Kansas City to Chicago, St. Paul, Minneapolis, Dubuque and Des Moines is the Chicago Great Western Railway. Three well equipped trains daily. Best of service. For further information apply to Geo. W. Lincoln, T. P. A., 7 W. 18th St., Kansas City, Mo.



Public Sale Cattle and Horses

On February 26, 1906, 14 miles southeast of Great Bend and 9 miles north of Hudson, Kansas, Stafford Co., 25 head of work horses, and everything required to run a 1600-acre wheat and corn farm; also 45 head of registered Hereford cattle, consisting of cows, heiferers and calves. Also 1 three-year-old bull. Cattle a little thin in flesh and no doubt will go at a bargain.

Pearl I. Gill, Great Bend, Kansas



PUBLIC SALE Jacks, Jennets and Mules

Second Annual to be held in

Savannah, Missouri, March, 8, 1906

22 large Black Jacks with white points, the kind that has built my annual breeding trade to over 600 mares and jennets at one barn and that has made Missouri famous as a mule State. As a class they possess the essential points for good breeders, size, heavy bone, good width, length, heads, ears, style, substance, and of the best breeding known. Four large Black Jennets in foal of same character. 22 extra good coming 3-year-old mules, the good boned, wide out kind. Some of them will mature in mules to weigh 1400 to 1500 pounds; and 4 good young harness horses. Write for illustrated catalog.

G. M. SCOTT, Route 2, Reo, Missouri.

St. Joseph Stock Yards Co.

South St. Joseph, Missouri

A Short Story to the Point—Ship Your Live Stock to St. Joseph and return home well pleased.

Jno. Donavan L. D. W. VanVleet M. B. Irwin

Vice-President and General Manager Assistant General Manager

Traffic Manager

Closing out Sale Jacks and Jennets

From the Osage Valley Farm at Moran, Kans., 28 miles west of Marc Scott.

Friday, March 9, 1906

Fourteen fine jacks 4 months to 7 years old; 18 Jennets. Stock will be guaranteed as represented. The best of references. Send for catalogue.

W. D. Gott, Xenia, Kan.

Auctioneers, Jns. W. Sparks, Lafe Burger, and others.

The Preparation of Smoked Meat.

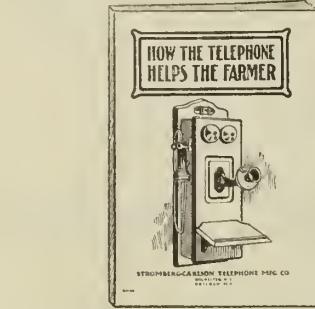
Smoked meat is either a table delicacy or a coarse article of food according to the method of its preparation.

A hickory wood fire used to be considered the only method of curing hams, shoulders and bacon. But since the introduction of Wright's Condensed Smoke made from the best hickory wood, the process of curing all kinds of smoked meat has been simplified and the work made much safer and easier.

Wright's Condensed Smoke is considered by all who have used it one of the grandest inventions of the times, and many can not praise it enough.

Wright's is the original condensed smoke and is put up in sealed bottles with metal cap—never in bulk. The manufacturers, the E. H. Wright Co., Ltd., Kansas City, Mo., send out a readable little book, "The New Way," which treats further on this subject and will prove very interesting as well as instructive to all who put by smoked meats for winter use. A postal card addressed to them will secure it.

The Stromberg-Carlson Telephone Manufacturing Co., of Rochester, N. Y., and Chicago, Ill., who make a specialty of farm telephones, have just issued a series of handsome pamphlets that



are of great value to the farmer for whom they are especially prepared. These pamphlets are handsomely illustrated and show complete plans for building and operating private lines. "How the Telephone Helps the Farmer," "How Successful Telephone Systems Have Been Organized," "Telephone Construction Material and Supplies," and "How to Build a Rural Telephone Line" are the names of these little books, the latter of which costs 10 cents per copy. Write the nearest office of this company for any one or all of these books and then build your line.

Profitable Stock Feeding.

Letters concerning the new book on "Profitable Stock Feeding" are being received daily from prominent men from various parts of the country.

Director B. C. Buffum of the Wyoming Experiment Station writes, "I have read this book with some interest and consider it a valuable addition to literature, which will be useful to farmers and stockmen. The chapters seem to be brief, to the point, clear and complete statements of the latest science of practical feeding. I will order copy for our Station library and recommend its use by students."

Secretary F. B. Coburn of the Kansas Board of Agriculture says: "I have looked through your book on 'Profitable Stock Feeding' and am much pleased with its nature and make-up. I shall hope to see it in the hands of stockmen everywhere and if they will make proper use of the vast fund of fact and experience it contains, the work will be greatly to their benefit."

Prof. James E. Rice of Cornell University, among other things says, "It strikes me as being intensely practical and should prove of great value."

Professor P. S. Shaw of the Michigan Agricultural College writes, "Your text book covers the ground concerning stock-feeding principles very fully and in an extremely practical manner, so that it should be of great value for the purpose for which it is intended." Note the advertisement.

COLIC CURE.

Testimonial Received by Dr. Earl S. Sloan, Boston, Mass.

Mr. G. H. H. Rowe, Sparta, Ill., writes: "While serving an officer on the Steamship Montezuma, which carried horses and mules to South Africa, I saw your Colic Cure used on the horses and never saw a case of colic prove too much for it. We had 1250 horses on board for over a month, so that we had a good opportunity to test the remedy thoroughly. The veterinary used your liniment also for sore shoulders and sprains, and the horses were landed in a particularly fine condition.

"I do not go to sea now, as I am farming, but have taken great pains to recommend your medicines, and always keep a stock on hand. I know of another case in Sparta, Ill. where your Colic Cure saved a \$170 mare after the veterinary failed to cure her."

Twentieth century ideas applied to an eighteenth century farm—that is the gist of the article, "A New Boy on an Old Farm," which is printed in The Youth's Companion for February 15. It is a contribution by Prof. L. H. Bailey, of the College of Agriculture, Cornell University. Full of interest for those who may know nothing of farming, the article is of value and importance to those who have made a life-work of agriculture. To the farmer's son, weary of the limitations of his life, the article offers suggestions which may give him a fresh and more hopeful view of his situation.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run for the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., - Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FIVE REGISTERED HEREFORD BULLS for sale. All good individuals. Eight months, 9 months, 1 year, 20 months, and 4 years are their respective ages. Cooper Monroe, Lyons, Kans., R. F. D. 5.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans., R. R. 2.

FOR SALE—The great show and breeding bull, 198 Duke of Wildwood 148143, that took 4th place at the Kansas City Royal in 1904; also 20 cows and heifers all choice individuals, some show stuff. Geo. Manville, Fawcette, Mo.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address, C. A. Kline, R. F. D., Tecumseh, Kans.

FOR SALE—Hereford bulls, choice and blocky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

HOLSTEINS—Bull calves, 3 to 8 months old, one yearling, extra choice. H. B. Cowles, Topeka, Kans.

PEDIGREED SHORTHORN BULL—3 years old; sire Magenta, who cost \$1,100 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we can use him. An extra animal. H. W. McAfee, Topeka, Kans. (2 miles west of Kansas Ave. on 6th Street road).

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 Ranch, Bliss, O. T.

FOR SALE—One straight Cruickshank bull, 14 months old, dark red, extra good animal. H. W. McAfee, Topeka, Kans.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Blvd., Kansas City, Mo.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires. A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (Imported); grandam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for 2 years. Her 4 dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kans.

SWINE.

FOR SALE—25 Duroc-Jersey boars, large enough for service and 60 gilts, open or bred. Pigs strong boned and best of color. Prices low. A. G. Dorr, Route 5, Osage City, Kans.

FOR SALE—Bred O. I. C. gilts and some good hogs. All good stock. A. W. Thoes, Inman, Kans.

FOR SALE—20 good, strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

FORTY HEAD of pedigree Duroc fall pigs; good color, well built. Write to Chas. Dorr, Route 6, Osage City, Kans.

HORSES AND MULES.

AN IMPORTED registered Percheron stallion, No. (43599) 24512, 8 years old, sound, color black. First class horse in every respect. Call or write J. H. French, 718 Kansas Ave., Topeka, Kans.

FOR SALE—Seal brown Percheron, Brilliant Junior 24583. His breeding and colts second to none in Kansas. Good reasons for selling. \$500 gets him if sold by March 1. Sound and guaranteed every way. L. Cox, Concordia, Ks.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—at reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOR SALE OR TRADE—Three fine draft stallions, one Shetland stallion, two good jacks. G. J. Price, Richmond, Kans.

HORSES AND MULES.

FOR SALE CHEAP—One gray registered Percheron stallion. Sound and all right. A. W. Thoes, Inman, Kans.

IF YOU WANT a Percheron, Belgian or Sadie stallion, write to Chas. Guffin, Rydal, Kan.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

FOR SALE—The black imported Percheron stallion Bonneval 23072, 8 years old, weight 2,000. Come and see him and get, ranging from 6 months to 3 years of age. Munden Percheron Horse Co., Munden, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, bark wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

POULTRY.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and Brown Leghorns, White, Buff and Silver Laced Wyandottes, Games, Golden Sebright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs, 15 for \$1. Write D. L. Bruen, Plate Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs, 5 cents each. \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeders of the choicest birds. Eggs \$1.50 per 15. Member American White P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen. No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Kans.

PURE Single Comb Brown Leghorn eggs; 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

WANTED—Two hen peafowls. S. S. Hatch, Peru, Kans.

BLACK LANGSHANS—Hens scoring 92 and upwards-headed by 2d and 4th prize cockerels from Kansas City Royal 1906 show. Eggs \$2 for fifteen; \$3.50 for thirty; special price by dozen. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kans.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kans.

FOR SALE—4 pair of White China geese; also 3 Bronze turkey tonis. Mrs. W. J. Grist, Ozawkie, Kans.

WANTED—Two hen peafowls. S. S. Hatch, Peru, Kans.

SEEDS AND PLANTS.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SELECTED SEED CORN, Hildreth's Yellow Dent, grown in Sumner County, \$2 per bushel. Send orders to W. A. Shreier, Argonia, Kans.

SMALL FRUIT PLANTS—For price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Sons, Route 9, Lawrence, Kans.

PEDIGRIED SEED-CORN—Raised from Funk Bros.' high-bred Boone County ("Special") White. The seed from which this corn is grown cost me \$5 per bushel. It is now acclimated to Kansas. Select ears for sale at \$2 per bushel. Bonner Springs Nurseries, Bonner Springs, Kans.

FOR SALE—Speltz, 50 cents; Macaroni wheat \$1 per bushel; f. o. b. Wheeler & Baldwin, Delphos, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes, six kinds. Prices on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety"; Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State corn-breeders' contest 1906, won 1st and 2d prize for the most productive acre-103 and 78½ bushels. Write to C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

ANNOUNCEMENTS.

GEO. A. HURON is a candidate for the office of Probate Judge of Shawnee County, subject to the Republican primaries.

A. E. DICKINSON.

I HEREBY announce myself as a candidate for the office of County Treasurer of Shawnee County, subject to the Republican primaries. G. W. VEALE.

YOUR BALLOT solicited for Register of Deeds at the Republican primaries. ROOSCOE C. SQUIER.

SUBJECT to the Republican primaries to be held March 10, 1906, I am a candidate for re-election to the Legislature from the Thirty-ninth district, which comprises the Sixth precinct of and additions to the Second ward, all of the Fifth and Sixth wards of Topeka, and all of the country south of the river.

ROBERT STONE.

HELP WANTED.

WANTED—Married man to work on dairy farm. Good, permanent place for right man. R. J. Linscott, Holton, Kans.

WANTED—Farm hand, married man, to work by the year; house furnished, cow, wood for fuel, garden plot, privilege to keep chickens, and good wages. T. P. Jones, Oipe, Lyon County, Kans.

WANTED—Man and wife to work on farm; or will rent to right parties. Sarah F. Harris, Lecompton, Kans.

MISCELLANEOUS.

"THE LAND," a monthly journal for the homeseker and landowner. 25 cents per year to new subscribers. Address The Land, Cot-tonwood Falls, Kans.

WANTED—Men to learn barber trade. Don't miss this chance; special offer for limited number. Just opened branch of the well-known Moler System of Colleges, our fourteenth school. All modern facilities. Few weeks completes. Wages paid in finishing dept. Positions waiting our graduates. Catalogue mailed free. Moler Barber School, 6th and Delaware Sts., Kansas City, Mo.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

STRAYED OR STOLEN from my farm, 2 bay horses, weight about 14 or 15 hundred pounds, one with blaze face, glaze eyes, feet white; other, one hind foot white, patch of hair off of right jaw. Suitable reward for return. Allen Flesch, Route 1, Garfield, Pawnee County, Kans.

WANTED—At once, sound young men for wages; promotion; experience unnecessary; instructions by mail; stamp for reply. Northern Railway Training Association, 620 Paxton Block, Omaha, Neb.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago, Ill.

WANTED—Your apples to grind. I do custom work every Saturday at my mill on West Sixth St. H. W. McAfee, Topeka, Kans.

WANTED—Men to learn telegraphy. Write J. P. Tighe, care Santa Fe Ry., Arkansas City, Kans.

"THE CEMENT WORKER'S HAND BOOK" tells you how to do all kinds of cement work successfully—walls, floors, walks, tanks, troughs, cisterns, fence posts, building blocks, etc., etc. Second edition. Cloth bound. Sold in all English-speaking countries. Sent to any address for 50 cents. Address W. H. Baker, Seville, Ohio.

WANTED—Lady Agents \$3 to \$6 per day, introducing into every household our brand new style hat pins. Exclusive territory, success certain. Send 25 cents for sample. W. M. Judy Co., 211 W. 9th St., Cincinnati, O.

Stray List

Week Ending February 8.

Harvey County—B. O. Hagen, Clerk.

Farm Thrashing Outfits.

Two years ago the State agent of a Wisconsin company that makes a specialty of farm thrashing machines visited me in the interests of his firm. He came at the right time to make a sale. My grain-stacks were putting on a garnishment of green. The thrashers never came. Their heavy outfits burrowed in the mire of barnyards and swales, slid off the slippery highways into soft ditches, and went through bridges weakened by floods. They were busier with treble than bundles. I was readily convinced of the advantage of having a thrasher all my own. I showed the agent my six-horse gasoline engine and asked him if that would do for the power. He said it would. I agreed to buy a Belle City machine with a 24-inch cylinder on the condition that it would do business. It came in a few days and filled the warranty. The way it disposed of damp, clinging straw surprised even those who were just going by and came in to be facetious. I thrashed my grain that fall with the ordinary farm help and one or two extra men. The ground was soft, but a good pair of horses put the machine just where it was wanted, likewise the portable gasoline engine. We could set them both and get to work while the heavy rigs would have been preparing to move. When we finished thrashing that year I told the boys that the future held no place for a grain stack on Old Oaks farm.

The next year and this fall we thrashed from the shock. There is much of economy in this and the method is one for which the little separator is especially adapted. Five men and two teams are required to make much of a show for a day's work in stacking grain. One more man and a third team are a fair thrashing crew for my outfit, although it is handier to have one team for the grain wagons. I use two double-box wagons. The grain is delivered to the wagon by a swinging spout on either side of the machine and requires very little attention until the box is nearly filled. All the men who have hauled my grain say it is easier to shovel it into the bins than to handle filled bags. The one who hauls to granary can attend to oiling the separator. The gasoline engine takes care of itself. There are then left three men to use three basket racks in hauling from the field, a man to feed and a man for the straw stack. It is handy to have a twelve- or fifteen-year-old boy to cut bands, but the feeder can get along pretty comfortably without him.

So it is by this manner of thrashing, and with about the same crew that would be required for stacking, the grain is put under a roof—secure from the elements; the double action of stacking and thrashing eliminated and no further worry about a persistent canopy of clouds—and mist and rain.

I am sometimes asked how many bushels I can thrash in a day. I have not kept a particular record in this respect. I have been content to jog along satisfied with the thrashing faster than I could stack. In thrashing beardless barley last fall, short of straw and perfectly dry, it came from the grain-spout a bagful a minute, which would be at the rate of at least a thousand bushels in an ordinary day's run. My six-horse engine does not drive the separator to its full capacity. Careful feeding is required, the power being pressed to its maximum.

I am satisfied with my investment. When the last bundle passed the cylinder last month I figured that after three season's use the machine did not owe me enough to worry about, and it is good for years and years yet. If I were to advise any one on the purchase of a new rig I would suggest a self-feeder, with, of course, more power than I have; an eight-horse engine would do—ten would be better. I would then say, "Have a good canvas cover for your separator, alots for your engine; the battery-box, especially, must be kept dry. Thrash 'any old time' that your grain is fit to stack. If it rains, throw on your canvases and 'get busy' at something else. When you see your best neighboring farmers building stacks go to thrashing again. And if you have three men of your own the ladies of the household, as they set the table for one extra at 'thrashing time,' instead of sixteen, will say, 'You're an old darling!'"—H. A. Bush, Fond du Lac Co., Wis., in Breeder's Gazette.

City Ways in the Country.

Rural delivery, interurban trolley systems, and the telephone are bringing to the farmer much that has hitherto been enjoyed exclusively by city folks, with none of the noise, hurry, and worry of crowded streets badly ventilated homes and unsanitary conditions which are so frequently found in the city.

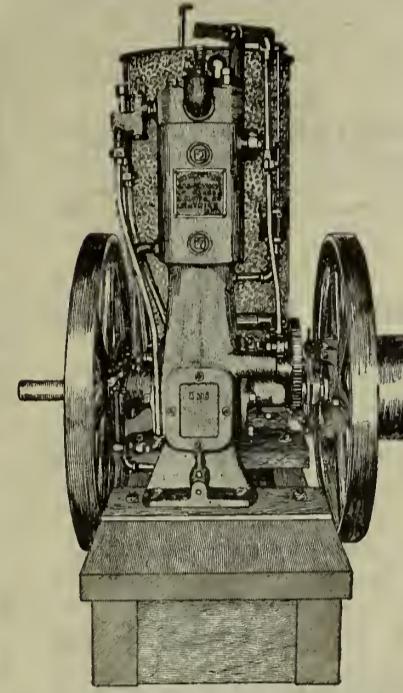
The farmer now has mail deliveries, communicates at will with neighbors and transacts his business by phone, keeping in close touch with the markets, to his great advantage, and all without the necessity of breaking into his work at a busy time. If need be, the trolley takes him to town in a jiffy. One result of this close touch with the world is that the country home is taking on more and more of the city's ways and comforts. In the matter of carpets, however, the sensible country housewife will stick to the good ingrain carpet, which covers the whole floor, in place of the city fashion of rugs and highly polished floors, which are not nearly so warm and require much more work to care for.

In this connection we call our readers' attention to the Lowell Inginal Carpet advertisement in this issue, telling of stylish ingrain carpets which have been famous for fully seventy-five years.

We call attention to the advertisement of the Rock Island Implement Co., of Kansas City, Mo. This shows the Rock Island riding lister which has won popularity among farmers for the following reasons: It has no tongue, and can therefore be driven much closer to fences than any other riding lister. The bottom hangs almost directly between the wheels and it can therefore be turned around without lifting the bottom out of the ground. It is frameless, and therefore much lighter than others, but on account of its pecu-

liar construction it is positively the strongest lister made. The driver sits immediately back of the seed box, and sees every kernel of corn as it drops, and again as it is being deposited in the ground. This is a fine farm tool and you will be pleased with it. Write for description and price.

For some time the Dempster Mill Mfg. Company have been manufacturing a two-horsepower four-cycle vertical engine, which has been so successful and is giving such splendid satisfaction, that they are putting in new machinery to assist them in meeting the demand for this engine. They are



now considerably behind in filling orders for their engines, and from indications will be obliged to work at their full capacity for some time to meet the demand for them.

The farmers and ranchmen of the West have been wanting an engine for pumping and other light work that would be so simple that a mechanic or gasoline engine expert would not be required to run it. The number of this class of engines they have bought of the Dempster Mill Mfg. Company would indicate that they have found it.

For the construction of their gasoline engines, the Dempster Mill Mfg. Company employ a corps of skilled mechanics who have been specially trained in gasoline engine work. Every part is made by an expert on that particular piece, and after the parts are assembled into the whole engine, it is tested while running, by men who see that each part is perfect and all working parts are accurately adjusted.

Nothing but the best obtainable material is used in the construction of all their engines and every effort is made to see that each engine is as nearly mechanically perfect as first-class machinery and skilled mechanics can make it.

The Dempster Mill Mfg. Company is one of the very few firms making both the four-cycle and two-cycle type of gasoline engines and making a success of both.

At present, they are making two-, four-, and six-horsepower vertical gasoline engine of the four-cycle type. They will continue to build the horizontal two-cycle engine in all the sizes they have been making and expect them to find as ready sale as formerly. Their two-cycle engines are noted for simplicity, durability and steady, even power.

The gasoline engine is fast becoming a necessity on the farm. The Dempster Mill Mfg. Company were not slow to recognize this and are putting forth their utmost endeavor to supply their customers with a first-class, high-grade engine. Mention the Kansas Farmer and write them at Beatrice, Neb., or Kansas City, Mo., for details.

An Immense New Factory.

Another huge factory has recently been completed by the Ohio Carriage Manufacturing Company of Cincinnati, Ohio. It is a most wonderful collection of buildings and equipment but, by all odds the most wonderful thing about it is that the whole plant is devoted exclusively to the manufacture of one single kind of vehicle—the Split Hickory Special Buggy, which these people sell complete, for only fifty dollars.

This immense new factory is the only one in the world given entirely to the making of one style of buggy. Not another bit of work of any kind is handled in it. Not a part of any other vehicle of any sort or description is made here. All the men in this factory do is make Split Hickory Special Buggies.

The enormous demand for these buggies which has made necessary the building of this big factory, has been created through a new plan the Ohio Carriage Manufacturing Company have of selling direct to you. They let you use one of their \$50 Split Hickory Specialists, with which they give a two year, legally binding guarantee, a month FREE to prove it is all they claim.

If you don't find it so, you can send it back.

The entire policy of this concern is to sell direct and save all the expense of go-betweens and unnecessary handling for you.

In their other big factories, the Ohio Carriage Manufacturing Company make Spring Wagons, Surrays, Carriages, Stanhops, Phaetons, Carts, Driving Wagons and a full line of Harness. All are sold direct to you and all are fully described and priced in the new 180 page Vehicle Book these people have just gotten out. They send a copy FREE to every one thinking of buying. A simple request brings it by return mail. Address The Ohio Carriage Manufacturing Company, H. C. Phelps, President, Station 251, Cincinnati, Ohio.

\$25 Kansas City to Portland, Tacoma, Seattle, Victoria, Vancouver and hundreds of Northwest points.

\$5 75 Cost of double berth from Kansas City in Tourist Sleeping Car leaving Union Depot 9.50 a. m., 6.05 p. m. daily.

This economical combination will be available any day from

February 15th to April 7th

Send me a postal to-day for particulars.

Burlington
Route

E. A. Abbott, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

1902

Protected by Block Signals

Block signals are especially important during the winter months. The first railway in America to adopt the absolute block signal in the operation of all trains was the

Chicago, Milwaukee & St. Paul Railway

This railway today has more miles of road operated under block signal rule than any other line.

The Southwest Limited leaves Union Station, Kansas City, 5.55 p. m.; Grand Avenue, 6.07 p. m. Arrives Union Station, 8.20 a. m.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street
KANSAS CITY



IN GEORGIA & ALABAMA, as well as the most prosperous dairyman, the most thriving breeder of horses, mules, sheep, cattle and hogs, the most expert fruit grower or trucker, is usually the Northern or Western farmer, who has located in those States in recent years and applied proper methods of culture. Thousands of others are coming this year and next.

WHY NOT YOU OR YOUR BOYS. No blizzards. No droughts. Average temperature forty-live in winter and eighty-five in summer. Rain full fifty-inches, evenly distributed. Tax rates low. No hard winters to feed against. Open sheds. Ten months pasture. These are but few of the many advantages.

NOW IS YOUR OPPORTUNITY to duplicate the success of these men down South, through the extension of our main line from Atlanta, Georgia, to Birmingham, Alabama, in and between which cities two million people consume farm products. The highlands are intersected with wide grassy valleys, and inter-penetrated with streams of purest water. The alluvial soil of the valleys produce the heaviest possible yields of clover, all grasses, corn, alfalfa, etc., and furnish luxuriant pasture. The highlands are ideal for peaches, apples and other fruits, and the mountain lands afford good range for sheep and goats. Lands can be purchased at from \$2.50 to \$35.00 per acre, near town, and good schools. Terms easy.

For handsomely illustrated literature and full lists of properties available throughout the South, address, mentioning this paper, J. W. White, G.I.A., Portsmouth, Virginia, or H. B. Bligham, A.G.I.A., Atlanta, Georgia.

SEABOARD AIR LINE RAILWAY.

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

Write us for description on June, July and August pigs. Prices \$8 to \$10 each. Eight choice herd sows, guaranteed. Prices right if taken at once. **NEWTON BROS.**, Whiting, Kans. Breeders of Registered Duroc-Jerseys.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable. **E. S. COWEE**, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Orchard Hill Herd of Duroc-Jerseys.
Please write for private sale catalogue of young boars and bred gilts and sows. **R. F. NORTON & SON**, Clay Center, Kans.

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale. **J. B. DAVIS**, Fairview, Brown Co., Kans.

Sabetha Herd of Duroc-Jerseys
Geo. Kerr, Sabetha, Kans.

Specialty of bred sows and gilts. Two of the best boars in the country at the head of herd. Write for prices or call. 'Phone at farm.

GOLDEN RULE STOCK FARM
LEON CARTER, Mer., Asherville, Kans.
Gilt-edged Duroc-Jersey Swine.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and sired in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

**HIGHLAND HERD
of Duroc-Jersey Swine**

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of spring pigs sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kausas Farmer.

Grant Chapin, - Green, Kansas

CRIMSON HERD OF DUROCS

Our herd is headed by first Price Boar Crimson Wonder, 38755, Jr., by Crimson Wonder, 26355, the great Boar Winner of many firsts, assisted by Kerr's Champion, 34469, this fine boar is now for sale, also some fine young boar gilts for sale, also some August and September pigs. Mr. and Mrs. Henry Shrader, Wauneta, Kans.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Cohn, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, Wichita, Kans.

Egypt Valley Durocs
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. **H. W. STEINMEYER**, Volland, Kans.

THE FAMOUS FANCY HERD,
Duroc-Jersey,
BRED SOW SALE.

At Concordia, Kansas, February 13, 1906. Write for catalogue now.

POLAND-CHINAS.

Elm Grove Stock Farm Poland-Chinas.
Bred Sod Sale February 14, 1906.
At Osborne, Kans.
F. A. DAWLEY, Waldo, Kans.

DIRIGO BREEDING FARM.

Poland-Chinas for sale of the most fashionable strains. Herd boar R's Grand Chief by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale. **J. R. Roberts**, Deer Creek, Okla.

SNYDER BROS.
Winfield, Kans.

Breed and have for sale Percheron stallions, Polled-Durham cattle, and choicest strains of Poland-China hogs. Correspondence and inspection invited.

POLAND-CHINAS.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented. **H. N. HOLDEMAN**, R. R. No. 2, Girard, Kans

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 33349; also a boar pig by Compromise 88203. Write us for prices and full description.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. **F. P. MAGUIRE**, Hutchinson, Kans.

Look out for the date of
MAINS' GREAT ROLLER TRUST

BROOD SOW SALE

James Mains, Oskaloosa, Kans.

Oak Grove Stock Farm

POLAND-CHINAS

Best stratus, good individuals. Choice fall pigs, both sexes, for sale at reasonable prices.

E. E. AXLINE Oak Grove

30 miles East of Kansas City on the C. & A.
"The Only Way." Long Distance Phone at farm, Jackson Co., Mo.

ROME PARK POLAND-CHINAS
and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Main's Herd of Poland-Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion, 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

GUS AARON'S
POLAND-CHINAS

Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27988, for sale. Some snaps here. Visitors welcome. Mention Kansas Farmer and write for prices.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans

Spring Creek Herd of
POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred for sale, to either Address

G. M. Hebbard,
Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREADED
POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37123, Slick Perfection 32604, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

200 HEAD POLAND-CHINAS

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK
1-2 Mile Sedgwick, Kansas

J. F. STAADT,
Ottawa, Kans.

Sells Choice Duroc-Jersey Hogs

Feb. 28, 1906

WRITE FOR CATALOGUE

CHESTER WHITES.

O. I. C. SWINE

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

SUNNY SIDE HERD O. I. C.

I have three boars large enough for service, this includes my best herd boar Pomona Chief 8614, also ten good gilts bred for April and may farrow; 25 head of summer and fall pigs of both sexes. I will sell the above hogs cheap considering the quality.

W. H. LYNCH, Reading, Kans.

World's Fair

CHESTER-WHITE HOGS

Short horn cattle, Oxford sheep and Peafowl. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs

Scotch Collie Dogs
B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,

H. D. Nutting, Prop., Emporia, Ks.

High Point Stock Farm

I have choice O. I. C. and Duroc-Jersey males. Also bred O. I. C. and Duroc-Jersey gilts for sale. B. P. Rock cockerels and eggs in season. Write or come and see

J. R. EBERT,

Route 3, Hunnewell, Kas.

PRIZE WINNING
O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulna, Silver Mtna and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

O. I. C. THE WORLD'S BEST
SWINE

200 head all sizes, both sexes, singly, pairs, trios or small herds. A large number by Norway Chief 12963 grand first and sweepstakes boar Nebraska State Fair, 1904. Top quality. Rock bottom prices. Write to-day for prices to

FISHER LIVE STOCK CO.
Hastings, Nebraska

BERKSHIRES.

BERKSHIRES

From the best breeding that can be had, for sale at all times. Male and female, bred and open. Prices and breeding that will suit you.

J. P. SANDS & SON, WALTON, KANSAS

CEDAR LAWN BERKSHIRES

My sows are sired by Elma's Prime 64778, and Berryton Duke 72924. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72868. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,
Route 1, Lawrence, Kans.

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice Boars, 100 to 150 pounds. 40 extra choice Gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kansas

BERKSHIRES

My Berkshires are fresh blood of the most popular families, as good as money can buy. In size and quality the herd has no competitor in the State and we make pork of the kind others "sell at pork prices."

E. D. KING, Burlington, Kansas

KNOLLWOOD

BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60124, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56023, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$160 daughter of Lord Premier 60001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

GALLOWAYS.

BERKSHIRES.

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willem, Inman, Kans.

ABERDEEN-ANGUS.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 80845. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

PARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kas.

RED POLLS.

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale. GEO. GROENMILLER & SON, ROUTE 1, POMONA, KANSAS

RED POLLED CATTLE AND
POLAND-CHINA SWINE.

Best of breeding. Write or come and see CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle Young Stock for sale

WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses and Plymouth Rock Chickens.

Address S. C. BARTLETT, Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams | RTK

"Offer some fine blocky bulls about one year old."

C. J. WOODS,

Chiles, Miami County, Kansas

HEREFORDS.

Registered Herefords

SHORTHORNS.

The Biggest and Best Herd of Shorthorns
in Southwestern Kansas, owned by
L. A. MEAD,
Kingsdown, Ford County, Kansas.
Sale—Bulls and females. Inspection invited.

J. L. MILLER & SON, Muscotah, Kansas.
Breeder of Shorthorn Cattle.
Six coming yearling bulls for sale at reasonable
prices. These animals are Rose of Sharon foundation
and are fine individuals and sired by The Champion
of Delaney Valley 154959, a son of Gentleman
126072, he by Red Knight bred by W. A. Harris.

Plainville Shorthorn Herd

Headed by Prince Lucifer 188683
A pure Scotch bull.
Stock for sale at all times.
N. F. Shaw, Plainville, Rooks Co., Kans.

ROCKY HILL HERD
SHORTHORN CATTLE
J. F. True & Son, Perry, Kans.

Meadow Brook Shorthorns
Herd headed by Baron Goldsmith 224633 by The
Baron 121327; females bred to him and choice young
bulls for sale.
T. C. KINGSLEY, Dover, Shawnee County, Kansas.
Railroad Station, Willard, Kans. Long Distance Telephone

SILVER CREEK
SHORTHORNS

5th annual public sale at Wichita,
Kansas, February 22, 1906. The offering
will be of the usual high quality
and will include some Scotch bulls and
females.

J. F. STODDER,
Burden, - Cowley County, - Kansas

GLENWOOD HERDS
Shorthorns and Poland-Chinas

100 Scotch and Scotch Topped Females, 8 Scotch
Topped Bulls in special offer, Pavonias Prince
207316 and Happy Knight by Gallant Knight 124468
in service.

C. S. NEVIUS, Chiles, Miami Co., Kans.
Forty miles south of Kansas City

Valley Grove Shorthorn

FOR SALE—Young bulls, cows and heifers.
Come and see them. Telephone via
Dover. Telegraph station
Willard. Address

T. P. BABST & SONS, Auburn, Kans

Elder Lawn Herd
SHORTHORNS

T. K. TOMSON & SONS, Dover, Shawnee Co., Kans.
Bulls in service: GALLANT KNIGHT 124468 and
DICTATOR 182524.

For Sale—Serviceable bulls and bred cows. Prices
reasonable and quality good. Come and see us.

CEDAR HEIGHTS SHORTHORNS

Scotch bulls in service. Cows carry three to five
Scotch crosses on standard Shorthorn foundations
Ten bulls 12 to 18 months old also a carload of extra
good 2- and 3-year-old heifers for sale. All red, and
all in good condition. Come and see our cattle.

D. H. FORBES & SON,
Route 8, Topeka, Kansas.

MILKING SHORTHORNS

Young bulls from heavy milking dams, sired
by the Scotch Topped Giltspur's Knight
171501 whose heifers are excellent
milkers. Write us.

N. MANROSE
Route 5, Ottawa, Kans.

SOLDIER CREEK HERDS OF
Herefords, Shorthorns, Polled Shorthorns

Service Bulls—Herefords: Columbus 17th 91364,
Columbus Boddybody 141836, Jack Hayes 2d 119761.
Shorthorns: Orange Dudding 149469. Polled Shorthorns:
Scotch Emperor 133446, Crowder 204815.

Heads consist of 500 head of the various fashionable
families. Can suit any buyer. Visitors welcome
except Sundays. Address

Joseph Peiton, Mgr., Belvidere, Kiowa Co., Ks

Pearl Shorthorn Herd

40 Young Bulls for Sale, ranging
from 6 to 24 months old and sired by
the noted Scotch bulls, Baron Ury 2d
124970, Sunflower's Boy 127227, and Bold
Knight 178054. Address

G. W. TAYLOR,
(Wire or Phone), Pearl, Dickinson Co.
(Mail Box No. 2), Enterprise, Kans.

SHORTHORNS

Herd headed by Harmony's Knight
218500, assisted by Scottish Minstrel
234970; both pure Scotch.

For sale, carload of cows and heifers
and carload of bulls. Must be sold by
the 1st of March. Come and see them.
Prices low. Phone at farm.

A. M. ASHCRAFT,
Atchison, Kans.

SHORTHORNS.

ALFALFA LEAF STOCK FARM

JOHN REGIER, Prop., Whitewater, Kans.
Breeder of thick-skinned, early-maturing Shorthorn
cattle.

NONPARAEL STAR 188488 at head of herd.

Rocky Hill Herds.

Shorthorns and Percherons.

In special offer a number of Scotch and Scotch-
topped females bred to Sultan, a good Scotch bull.
Also some good bulls ready for service. Prices rea-
sonable.

J. F. TRUE & SON, Perry, Kans.
R. R. Station Newman, 12 mi. east of Topeka.

ALYSDALE HERD
SHORTHORNS

Headed by the great Cruckshank bull, Prince Con-
sort 187008, sired by Imported Prince of Perth 158879,
and out of own sister of Lavender Viscount 124755.
3 Fine Young Bulls—13 to 16 months old, for sale,
at very reasonable prices.

Sired by such bulls as Lord Mayor, Mayor Valen-
tine, and Proud Knight.

C. W. MERRIAM,
Columbian Building, Topeka, Kansas

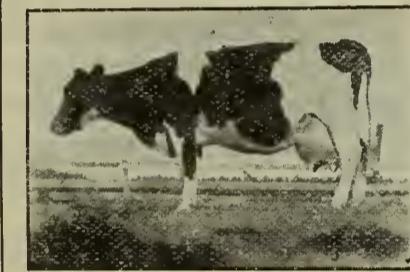
New York Valley Herds

of Shorthorns and Berkshires

Baron Rupert 248267 at head of Shorthorns. Young
Scotch-topped and Bates bulls for sale. Royal Star
76263 and Star Lee 88238 at head of Berkshires.
Choice early fall heifers and gilts for sale. Also a few
brood sows. Telephone on farm.

J. T. BAYER,
Route 1, Yates Center, Kans.

HOLSTEINS.



C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young Bulls and a few young cows and
heifers for sale.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all
times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the
best strains of breeding in Missouri. Good breeders,
large, black, with light points, prices right. Write
me what you want. Address,

WALTER WARREN, Veterinarian,
Windsor, Mo.

REGISTERED BLACK MAMMOTH
and CATALONIAN JACKS, SAD-
DLE and TROTTING HORSES
The best in the state and at a
low price. Come, or write for
prices on what you want.

G. A. FEWELL,
Leeton, Johnson Co., Mo.

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700
pounds, 4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Mon-
arch 151, 18 years old. Also 3 young
jacks, Spanish Mammoth breeding. Will
exchange stallions or jacks or trade for
other stock. This stock is all perfectly
sound and good breeders.

T. H. TERRY, Bavaria, Kans.

DO YOU WANT
GOOD READING

?

The yearly subscription price of the
following magazines is as follows:

Review of Reviews.....	\$3.00
The Cosmopolitan.....	1.00
Woman's Home Companion.....	1.00
Kansas Farmer.....	1.00
Total	\$6.00

We have 1,000 subscriptions for the
first three to dispose of and can therefore
offer the four above-named magazines
for \$3 received at this office. The
four must go in one set, though they
can be sent to different addresses.
Address

KANSAS FARMER CO.,
TOPEKA, KANSAS.

LIVE-STOCK AUCTIONEERS.

LIVE-STOCK AUCTIONEERS.

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide
acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management
of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma.
Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

Bunceton, Mo.

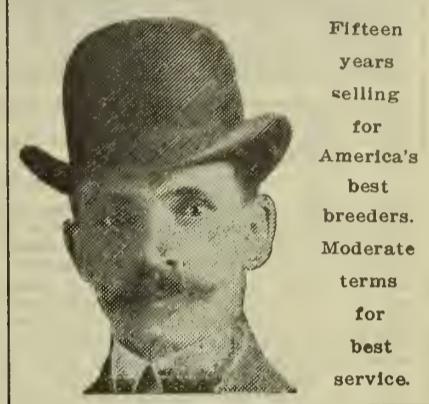


First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer

MARSHALL, MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER,
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.

Strongly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire
for prices and dates.

Free sale tent at cost of handling only when
employed. Tel. Phone 25. Bell Phone 22

L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty. All Herd Books
Catalogues compiled. Sale tent free.

Some Railroad Advice

The traveling public that they are the shortest routes, others that they are
the scenic route, but the

Mexican Central Is Positively The Only Route

To travel over in touring Mexico. First class through Pullman Buffet
Sleeping Car runs daily between El Paso and the City of Mexico. Agencies
in all the principal cities of Europe and the United States.

It is the ONLY line reaching practically EVERY important city. It
covers the REPUBLIC from NORTH to SOUTH and EAST to WEST. Remember
the old reliable route to MEXICO, and insist on your ticket reading
that way.

For further information call on or address,
W. D. MURDOCK,
Passenger Traffic Manager, City of Mexico.

A. Duichery, G. W. P. A.,
St. Louis, Mo.

Cheap Rate to
California.

Californians raise gold—they don't mine much now. An easier way has
been found than that! It is now obtained by farming. The alchemy of
nature converts the oranges, lemons, olives, grapes, wheat, alfalfa and other
products of the soil into good clothes, comfortable residences, and assuring
bank accounts. 'Tis being done every day in California. Wouldn't it
pay you to inquire into this? Better yet, why not go there?

Only \$25.00

From Topeka to almost all points in California and to many places in
Arizona. Liberal stop-over privileges.

On sale daily, February 15 to April 7, 1906. Tourist sleepers daily on
fast trains. Harvey meals.

For particulars, apply to

T. L. KING, C. P. & T. A.,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.

Profitable Stock Feeding

. . . by . . .

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY,
NEBRASKA, UNIVERSITY.

How to feed for beef, milk, mutton, Poultry and Pork with chapter
on the horse. More than 400 pages. Beautifully illustrated with por-
traits of typical animals of each class. Price \$1.50. Given with one year's
subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humbugged" by "bucco salesmen"? Iams owns and sells more 1st-class stallions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. "Back up," Bill, see Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

151—STALLIONS—151

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent "tom stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State fair was the, "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State fair. At Iowa State fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and judge, Iams pays horses' freight and advertiser, but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1,000—SAVED AT IAMS—\$1,000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallions at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesmen's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by "slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM
Breeder and Importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS.
Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.
S. A. SPRIGGS. Westphalia, Kansas.

FIFTH ANNUAL SALE

Fifty Registered Percheron Stallions and Mares, from Whitewater Falls Stock Farm, J. W. and J. C. Robison, Props., Towanda, Kansas

SALE HELD AT WICHITA, KAN., FEB. 21, '06

25 STALLIONS AND 25 MARES

Send for Catalogue to J. C. ROBISON, Towanda, Kansas

200 HEAD

OF

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

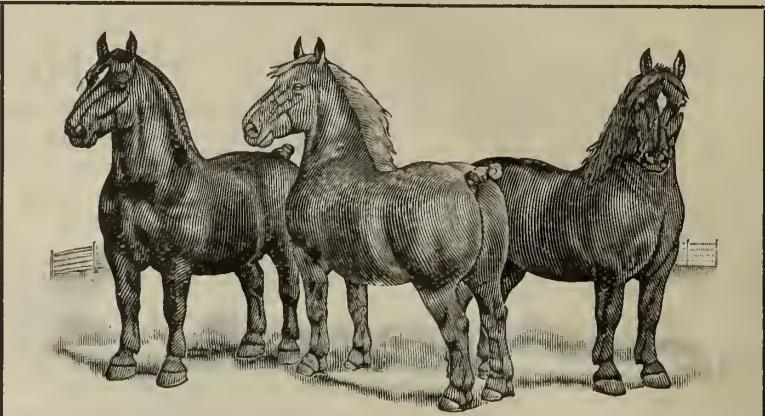
Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager,

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists, Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor, Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	FOR \$1.60
PEARSON'S MAGAZINE	
NATIONAL MAGAZINE	
AMERICAN BOY OR.....	
PHYSICAL CULTURE MAGAZINE.....	

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

QUALITY, SIZE AND THE BEST OF BLOOD WILL BE FOUND IN OUR DUROC - JERSEY BROOD SOW SALE

Tuesday, March 6, at farm, four and one-half miles southeast of Republic, Kansas

Thirty tops of our herd will be sold, consisting of tried brood sows, fall yearlings and spring gilts—all sows safe in pig to the following herd boars: Shakespere 3d 17919; Model H. 37967 by Higgin's Model; Honest John 37383 by Young John; Long Orion 37385 by Orion; King John by Honest John. Will also sell four Aberdeen-Angus bull calves. One registered calf, Eratum No. 74064, sire Eras of Linwood No. 46173, dam Gladys C. 31894. All stock in best of health. Catalogues ready.

Ward Bros., Proprietors,

Republic, Kansas

COL. JOHN BRENNAN, Auctioneer.

STRAWN'S SHORTHORN SALE

AT VALLEY FALLS, KANSAS, MARCH 1, 1906

25 Head--6 Bulls, 19 Cows and Heifers

My sale to be held March 1 at my stock farm five miles north and two miles west of Valley Falls, and one mile north of Half Mound, offers a splendid opportunity to those who wish to add to or establish a herd. We have been breeding Shorthorns for many years, and our offering includes many breeding cows, with which until now, we have refused to part. Some of my calves are grandsons and granddaughters of Gentlemen 126073, the famous Kansas Agricultural College bull, who was formerly at the head of my herd. I also offer my grand herd bull, Prime Albert 213593. These cattle are not fat but are in true breeding form, and in such shape as can not fail to do good for the buyer. At this sale I will also sell a work team and a team of driving horses; also some 2- and 3-year-old mules. Also 18 grade cattle. For further information and catalogue, address

L. R. STRAWN, Half Mound, Kansas

Col. Lafe Burger, Auctioneer.

Mains Great Roller Trust Poland-China Bred Sow Sale

At farm 2 1-2 miles southeast of
Oskaloosa, Kansas, February 28, '06

70 head, including 10 young boars by Empire Chief, 4 young herd headers. Some extra young sows by Empire Chief open. Over half of my selected reserved herd will go in this sale. Half of the sows are by Empire Chief. Two-thirds of the offering will be bred to Roller Trust 37010 by High Roller 37009, the champion of Ohio State Fair and sire of 15 World's Fair winners bred by S. E. Shellenberger, Camden, Ohio.

If you want something with size and finish you will find it at this sale. Sale under cover.

Cols. Lafe Burger, Wellington; McFadden, Whiting; John D. Snyder, Winfield; and J. M. Pollom, North Topeka, auctioneers. Oscar Simmons, Nortonville, Clerk. Write for catalogue.

JAMES MAINS, Oskaloosa, Kansas

Twenty-eighth Annual Jack and Jennett Sale

Tuesday, March 6, 1906, at Limestone Valley Farm

6 miles east of Sedalia, 2 miles north of Smithton, Mo.

Sixty head of registered jacks and jennets of the same breeding and great merit that won for us 70 of the best prizes at the World's Fair of St. Louis, 1904. Terms cash. Every representation guaranteed. Sale at 10 a.m. in heated tent. One of the very best offerings ever offered at public sale. Write for catalogue and come. You will be pleased with our stock and we will be pleased to entertain you at our expense.

27 Jacks Like the Above to Be Sold.

L. M. Monsees & Sons, - Smithton, Missouri

Auctioneers: L. R. Harriman, Jas. Sparks, C. J. Hieronymus, J. Z. Wells, W. D. Ross, J. D. Thompson.



Having decided to retire from active business, I will sell at public auction at

Hope, Kans., March 6, 1906,

all my Galloway cattle consisting of 23 head of females aged from 10 months to 8 years old, and 10 bulls, registered Galloways from 10 to 30 months old. This is a herd of well-bred registered Galloways, among which are Senora R. 18200, 3d prize 2-year-old Iowa State Fair 1902, in class of 12; and first at Nebraska State Fair 1902. She is the mother of several in this sale. Poncho of Maples 11522, mother of several show animals, also several in this sale. Ephebe of Waverree 11904, dam of Ethel, champion female of Winnipeg 1901, mother of several. Sallie W. 18947 from Imported cow and others. Will also sell 15 miles 3 and 4 years old. About 40 high-grade Galloway cattle and milk cows and a lot of other stock.

Sale to begin at 10 o'clock. Cols. J. R. Burton and H. R. Little, Auctioneers. Address

Thos. Gribben, Hope, Kans.

KIRKPATRICKS POLAND-CHINAS Public Sale. Expenses off price. Buyer satisfied or pig returned and money refunded. Splendid lot of young boars ready for service. A few fancy ones for the showman. 25 bred gilts guaranteed safe in pig to Rathbinder, half-brother of Medler. No better pigs nor fashionably bred in the corn states. Have been fed and raised expressly for prolific and profitable brood stock. Write or come and see H. M. KIRKPATRICK, Walcott, Kansas.



CALIFORNIA



Farms For Thousands!!

Prices \$35.00 and upward per acre

CLIMATE
Mild winters
Warm dry
summers
Cool nights.

SOIL
Rich sandy
loam that
grows any-
thing.

PRODUCTS
Greatest
variety of
crops known
in any
country of
the world.

**IRRIGATION
SYSTEM**
Finest irriga-
tion system
in California.
Low rate of
62½ cents
per acre, per
year—80
miles of
ditches now
on tract.



View of San Joaquin River, California. The Fresno Irrigated Farms extend eight miles along the river at this point.

RAISIN LANDS
Suitable land
for raisin
culture in
the only
successful
raisin section
in the
United States.

VINEYARDS
Table grape or
wine grape lands.
Yields \$75 to \$200
per acre.

ORCHARDS
All fruits known
to California grow
here. Oranges,
Lemons, Peaches,
Apricots, Pears,
etc.

**MODERN CON-
VENIENCES**
Rural free
delivery—
Telephones
Electric
power—
Lights, etc.

We are just putting on the market in sub-divisions to suit.

26,000 Acres of Modern Irrigated Farms

Do you know what California alfalfa is? This is the most profitable forage plant known; when once started yields 5 to 6 crops per year and 1 ton to 1½ tons per crop per acre. Sells at \$6.50 to \$7 per ton in the stack—grows for 7 to 10 years without reseeding—just figure this out.

Of course you have eaten Raisins, but do you realize their importance? This is the only successful Raisin District in the United States. \$2,500,000 of Raisins produced in Fresno County in 1905. \$150 to \$300 per acre is the average yield of a raisin vineyard, 50 per cent of which is net profit and the crop does not spoil.

This is the home of the new Fig industry. Here we produce the Calnigrud Fig. This beats the fig of Asia Minor—Cleaner, Better, Larger than the imported. Hundreds of acres already growing in the county.

This page is too small to tell you all about these ideal Farms. Write for our Booklet.

Where There are No Crop Failures

We are building a new town—Kerman—in the middle of this immense tract of land. 40 square miles of Fertile Farms, just think of it. We are building fine new modern hotel, stores, creamery, park, grading streets, piping water. Have telephones, telegraphs, rural delivery, express office. All modern conveniences. On main line of S. P. R. R., 14 miles from Fresno City. We have the finest Irrigation System in the world; 80 miles of ditches carry the sparkling water of King's River from far-away Mt. Whitney—the second highest mountain of the United States, over every quarter section of our farms at 62½ cents per acre per year.

WRITE FOR
NEW 64-PAGE
BOOKLET
FULLY IL-
LUMINATED.
MAILED
FREE.
THIS TELLS
YOU ALL
ABOUT
THIS GRAND
OPPORTUNITY.
WRITE AT
ONCE

WE WILL
GLADLY
ANSWER ANY
QUESTIONS
ABOUT THE
RICHEST
COUNTY OF
CALIFORNIA,
FRESNO CO.
1905 PRO-
DUCTIONS,
\$18,512,000.
WRITE TO
US AT ONCE.



Four hundred head of Beef Steers grazing on alfalfa meadow.

Fresno City has 22,000 Population.

Fresno Irrigated Farms Co.,
Fresno, California

Main Office—511-514 Kohl Bldg., San Francisco, California
Fresno Office—1161 I Street, Fresno, California

KANSAS FARMER

Volume XLIV. Number 9

TOPEKA, KANSAS, MARCH 1, 1906

Established 1863. \$1 a Year

THE UNDERFLOW.

It took the Government scientists a long time to learn about the underflow waters of the Kansas plains what the well-diggers and farmers knew from the earliest times. The term "underflow" was formerly derided as a misnomer, an absurdity; now it is in good and regular standing as expressing an important and well verified fact.

The U. S. Geological Survey has investigated the underflow of the Arkansas, directing its labors especially to the vicinity of Garden City, Finney County, Kansas.

The work of investigation consisted in accurately mapping the water plane within a distance of 6 to 10 miles from the river channel, and in making observations by the electrical method of the rate of movement of the underflow. The slope of the water plane has been found to be between 7 and 8 feet to the mile in a general easterly direction, and from 2 to 3 feet to the mile toward the river channel from the country immediately to the north and south. At the first set of underflow stations, which extended in a north-south line about $2\frac{1}{2}$ miles west of Garden City, the velocities of the ground waters were found to be remarkably uniform, varying between 8 and 11 feet per twenty-four hours. The gravels, except occasional layers or silt, were exceedingly uniform in size and character of grain. The stations at which the determinations were made extended from the edge of the sandhills on the south to a distance of about 2 miles north of the river channel.

Similar determinations were made at a series of stations near Sherlock, Deerfield, and at points near Lakin and Hartland. The results differed little from those obtained at the earlier stations, except that more sorting of the gravels has taken place at these latter points, giving greater variety to the rate of movement. The usual velocities vary between 6 and 24 feet for twenty-four hours, the average being not far from 8 feet per twenty-four hours. The quantity of ground water that is passing down-stream is so great and the water passes through the gravel so freely that there is no surplus left to form surface streams or to form a perennial supply for the Arkansas River.

The investigation showed that in time of flood the Arkansas River contributes water to the underflow. Existing plants which supply water for irrigation along the Arkansas were carefully tested. The cost of pumping is low on account of the very large amount of water obtained when the water in the wells is lowered only 5 to 7 feet. The intention is to erect a pumping plant to collect the underflow waters for irrigation.

It is hoped that the investigation will be extended to other portions of the plains region. The "sheet water" under the uplands is by many believed to be a great moving body of water, much of which enters the soil on the slopes of the Rocky Mountains. Doubtless the "sheet water" is greatly augmented if not entirely derived from percolation of rain-water which falls upon the plains. But has it a motion similar to that of the underflow of the Arkansas?

THE HARE CHEWS THE CUD.

EDITOR KANSAS FARMER:—Will you please answer the following question in the KANSAS FARMER? Does the hare chew the cud?

URIAH SLABACH.

McPherson County.
The Bible is pretty good authority

on natural history as well as other subjects. It says in Deuteronomy 14:7: "Nevertheless these shall ye not eat, of them that chew the cud, or of them that divide the hoof; as the camel, and the hare and the coney; for they chew the cud, but divide not the hoof; therefore, they are unclean unto you."

THE GROWTH OF LAND TENANCY.

A tendency towards the centralization of lands in the hands of a few individuals is one of the modern economic developments to which attention is just now being directed in Missouri. One man in Atchison County, Missouri, owns over 46,000 acres; the Scully lands in Bates County comprise about 50,000 acres; the Hunter interests in Southeast Missouri include 35,000 acres; Rankin is said to own 36,000 acres; the Stone Land Company has 35,000; the Deering Harvester Company owns immense tracts of unknown extent in the most fertile section of Southeast Missouri, and there are many other holdings equally large. The same misfortune is developing in Kansas.

George B. Ellis, secretary of the Missouri State Board of Agriculture, calls it "an unquestionable tendency towards a tenancy system similar to that which prevails in the countries of Europe." He thinks, however, that it has not reached sufficient proportions to cause alarm for the immediate future.

H. J. Waters, dean of the Missouri Agricultural College, discerns the same movement:

"If the present tendency towards the purchase of real estate by non-residents is continued," he says, "we are at the beginning of a tenant system with all of its attendant disasters. A

tenant system of farming will seriously retard agricultural progress, interfere with the improvement of rural schools and farm homes, and affect adversely the intelligence and prosperity of the State. Let the American farmer become a tenant, and in a few generations European conditions will be duplicated on American soil; the farmer will be a peasant without spirit or ambition. Unquestionably, the present tendency is in this direction. How it will end no one can foresee."

BLOCKS OF TWO.

The regular subscription price of the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered; both for one year, for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

POINTS ON BREEDING SEED-CORN.

Plants, like animals, are susceptible of improvement by breeding. The fact that plants, as well as animals, are possessed of both male and female parents is now generally recognized. It opens a field for experimental work in the domain of crops as inviting and as promising of results as that occupied by the breeder of animals.

Like tends to produce like in plants

as well as in animals. The union of the excellent, wisely selected, is likely to result in greater excellence in the progeny. In plants as in animals "the feed is as important as the breed," so that wise selection must be followed by judicious culture in good soil.

Of the cultivated plants none is more pliable in the hands of the breeder than is corn; none responds more freely to good soil and good cultivation; none presents more variations on account of inherent qualities, and none more freely crosses.

To enter a little into the elementary facts about corn, it is well to recall that the male blossom of corn is the tassel and the female is the silk.

The falling of the yellow dust, or pollen, from the tassel upon the silk is essential to the production of grain and is called fertilization.

Experiments have been made in close fertilization, that is, in supplying to the silk pollen from the tassel of the same stalk. This has resulted in deterioration in the offspring. Corn naturally distributes its pollen widely, and we may well take this as a hint that self-fertilization is to be guarded against by the breeder. This doubtless takes place in nature occasionally and may be, and probably is, one of several possible causes for variations in productiveness recently discovered.

It will not be possible here to enter into a detailed discussion of points to be observed in the improvement of corn. An important practical question, however, is, how can the farmer who reads this improve his corn by breeding, and that without undertaking confusing and intricate problems? It is the purpose of this article to indicate a line of work, simple in itself, which



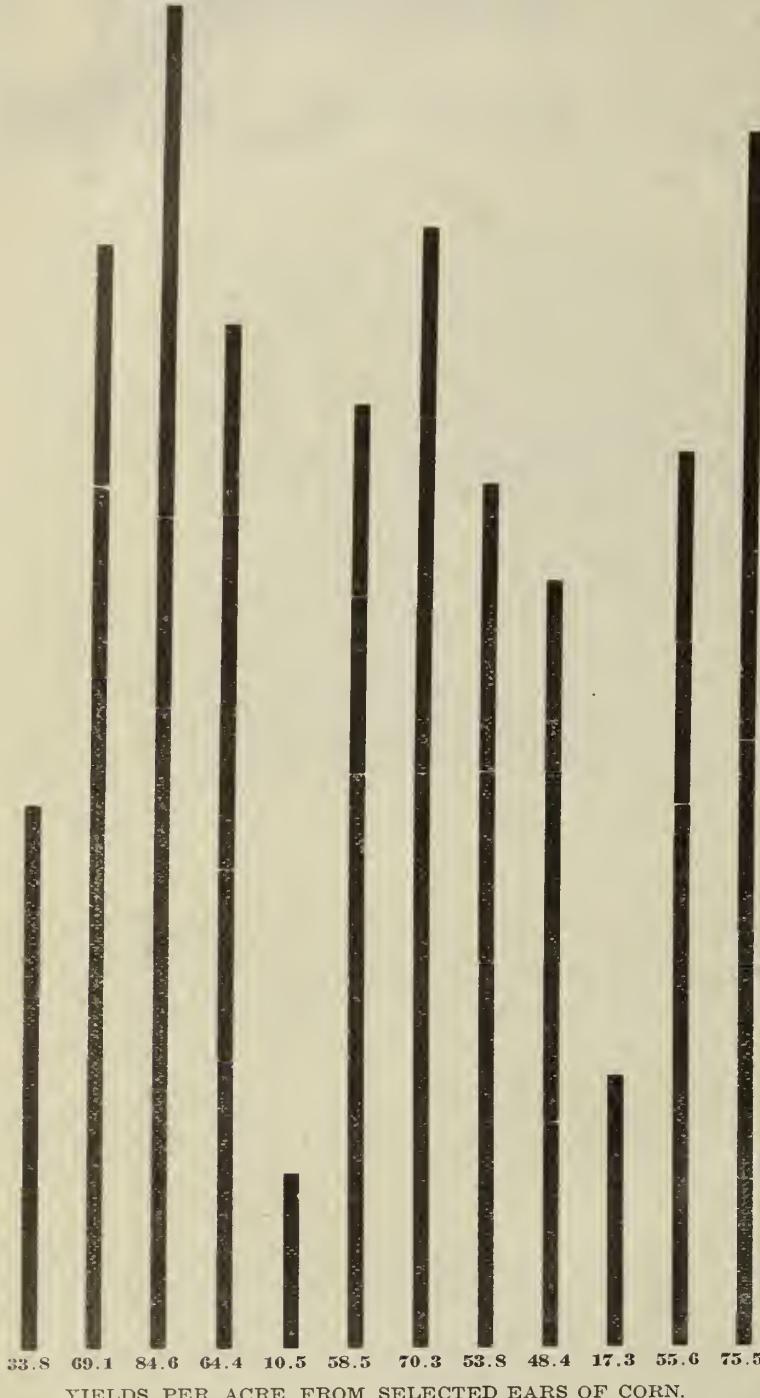
IAMS' ESPoir-DIE-RAGNES (21053).

Bay, Royal Belgian, 5 years old; weight 2,140 pounds; second prize winner at Nebraska State Fair, 1905. A "real Dutchman"—one of 120 "toppers" that must be sold at \$1,000 and \$1,500 by Frank Iams, St. Paul, Neb.

will enable the busy farmer to improve the yield of his corn by the selection and breeding of a strain suited to his conditions.

In an experiment at the Kansas Experiment Station, several of the best ears were selected from a lot of good seed-corn. The corn from each ear was planted in a row and the rows of these several selected ears were placed side by side through a field of corn of the same variety. At gathering time the product of the several ears was kept separate and the yield per acre was computed.

There was surprising variation in the yields as shown by the following diagram and table:



ear in a row as was done in the earliest above described—in shelling take out entire rows. Label the rows planted with the half of the grains from the ears, and label the half of the grains not planted so as to be able to identify them. Put away the unplaned grains in packages where the mice can not get at them and where they will have a favorable opportunity to retain their vitality until next year. Give the seed-corn rows the best of care and cultivation, and ascertain carefully the yield per acre from each half ear. Selected produce of the best rows will be good seed for general planting next year; but the fine work of breeding will be done with the half-ears that

Miscellany

Patent Rights.

EDITOR KANSAS FARMER:—On account of the average farmer's lack of knowledge concerning patent rights he is sometimes imposed upon by men who take advantage of his lack of information. But recently, several farmers of Rice County, Kansas, had an unsatisfactory experience in this respect. A certain man, representing a Concrete Post Co., came to Lyons, the county seat, and during the few weeks he was located there did business with these farmers above referred to. This man claimed the rights of a Government patent, and made broad claims for his patent, but of course failed to exhibit to these men certified copies of the letters patent under which he claimed protection. He claimed that he was not operating a patent-right scheme, yet he claimed the protection of letters patent. To evade the State laws concerning patent rights, he claimed to not offer territory for sale. By taking advantage of technicalities his deals with the farmers were so arranged that in the assignment of territory these men practically paid a high price for the territory assigned them. These farmers did not learn the number nor date of issue of the letters patent under which they were promised protection, and, having seen no certified copy of letters patent with specifications attached, they do not know the points covered by their patent. If indeed they have the protection of a patent at all. They took Mr. Betz's word for all this, without carefully investigating this matter for themselves, and gave him their notes or paid him their money. As a result these men are generally dissatisfied with both their purchase and their experience.

Patents are legal, right and proper when they serve the purpose intended by the Government. The object of the Government in granting letters patent is to stimulate and encourage the exercise of inventive genius by granting to the inventor of useful devices certain rights and protection. Letters patent give to the inventor or patentee "the exclusive right to make, use and vend" his invention "throughout the United States and the territories thereof" for a period of seventeen years from date of issue. And the patent laws of our Government grant absolute protection to the extent the patented article is actually covered by the specifications attached to the letters patent.

No person should purchase a patent right, or secure territory under a patent claimed, without first examining a copy of the letters patent certified to by the Commissioner of Patents, Washington, D. C., with copy of specifications attached thereto. By giving the number of a particular patent any person can secure from the Commissioner of Patents a certified copy of the letters patent with specifications attached, if he will enclose with his request the required fee of eighty cents. The certified copy is proof conclusive that letters patent have been granted by the Government, and the attached copy of specifications determines the points actually covered by the letters patent. And further, no person should invest money in a patent right, or expect protection under any particular patent, without first satisfying himself that the party offering a patent right or promising protection under a particular patent, is either the patentee or the legal owner by deed of assignment. The fact that parties dealing in patent rights or promising protection under a Government patent fail to carry with them, or are loth to exhibit, certified copies of the patent claimed with specifications attached, is indicative that something is wrong, either with the patent claimed or the method of business practiced. If farmers will observe these precautions, they will not easily be caught napping and will be saved loss and unsatisfactory experience along this line.

H. H. ZEIGLER.

Reno County.

Taxation.

EDITOR KANSAS FARMER:—Can we not have a little discussion on the above subject, as the time is drawing near for the assessors to meet and form a basis of agreement? Possibly some one will tell us where to find the law authorizing them to take any per cent of the real value of property for taxation instead of returning it at its real or true value as they swear they do. They do not seem to give themselves range enough in valuing property.

We have land in our county (Stafford) that sold recently as low as \$3

and some as high as \$50 per acre, and the \$3 land is the dearest. Some of our land near town and some tracts in town are worth more than \$100 per acre and some in this county is dear at \$2. The former is assessed at about \$10 per cent of its value and the latter at 50 per cent of its value. And what is true about land is also true of the improvements on it—household goods and other personal property.

It looks very bad to see a lot of stock on a farm that does not appear on the assessment list; and to see a farmer haul off or sell more grain than he gives in for taxation; and to see and know that about all of our taxpayers have cash on hand every day in the year and not a cent appears in their sworn statements. And it looks equally as bad to hear our merchants and business men tell what their stock of goods amounts to or invoices, and them to look at their sworn statement to the assessor, and know that the latter statement is false.

An old subscriber to your paper and a taxpayer in Stafford County.

Likes Cement Floor—How Made.

EDITOR KANSAS FARMER:—I read an article in the KANSAS FARMER in regard to cement floors and asking those to write who had experience in that kind of floor. In 1903 I put a floor in my horse barn and will say that it is the best floor that I ever had. I have tried dirt floors and board floors, and the cement beats them all. I made the ground solid, took coarse gravel nine parts, cement one part, mixed them thoroughly, wet them when mixed and put on that concrete six inches thick and leveled down. When that set so we could work on it, we took coarse sand three parts, and cement one part, and gave it a slope of four inches, and troweled it smooth. It is water-proof and all right, and it cost me \$5 less than the board floor did, and is ten times better. Use plenty of bedding and I will guarantee it to be satisfactory.

F. M. STAMBACH.

Sedgwick County.

Reasonable Switch-Board Rates.

EDITOR KANSAS FARMER:—Are you sure that you are well advised as to the price usually charged by telephone companies, for central service of rural or farmers' lines?

I notice in the last KANSAS FARMER that you say to "A Subscriber" from Harvey County, that 50 cents a 'phone per month is cheap, and recommend him to contract for as long period as he can at that price. I am told that in Russell and Wilson Counties and in other parts of this country, the price is from 15 to 25 cents per 'phone, and I should think 50 cents an exorbitant price, as this is for switch-board service only, and does not include any expense for care of line, etc. I do not wonder that 'phone companies are anxious to contract for a long time ahead at that price, where individual 'phones cost an average of only \$1 per month.

Gray County.

S. E. BARTON.

Table of Contents

Alcohol made unfit for use as a beverage, removal of tax on.....	219
Alfalfa at small cost, success with.....	212
Alfalfa in cocks, cure.....	211
Alfalfa in early spring, sows.....	211
Alfalfa, spring crop to precede.....	211
Aunt Kate to Donald on the farm.....	221
Bretton, Jules.....	223
Cement floor, likes.....	220
Chaldean club.....	223
Corn and how to raise it, planting.....	212
Dairy barn, suggestions for construction of a modern.....	230
Dairying, cost and profit in.....	231
Dogs and sheep.....	216
Educated motherhood.....	220
Energy, stored.....	235
Farmers meet at Stillwater.....	235
Farm notes.....	212
Feeding questions.....	214
Field-peas and oats.....	211
Hare chews the cud, the.....	209
Johnnie's fun.....	222
Joys of the country (poem).....	220
Land tenancy, the growth of.....	209
Musical insects.....	221
New Lancaster grange.....	219
Out there in Kansas.....	215
Patent rights.....	210
Poultry culture.....	228
Poultry notes.....	228
Questions, seven.....	711
Rabbits, live vs. dead.....	235
Rape.....	214
Recipes, tested.....	220
Roads, seven principles in making.....	224
Rose tournament.....	220
Sabean club.....	222
Secret of the song, the (poem).....	221
Seed corn, moles and birds.....	211
Silos, underground.....	214
Slaughter tests at hog-feeding experiments.....	215
Switchboard rates, reasonable.....	210
Spray for profit.....	226
Taxation.....	210
Texas fever in cattle.....	214
Twine, Kansas binder.....	219
Underflow, the.....	209
Veterinary department.....	218
Why? (poem).....	222
Woman's club, a.....	223

Agriculture**Seed-Corn, Moles, and Birds.**

EDITOR KANSAS FARMER:—Please let me know through the columns of your valuable paper the proper method of treating seed-corn with coal-oil or turpentine to prevent moles and birds from taking it.

G. H. COLEMAN,
Montgomery County.

You will find it difficult to make any application of strong repellants to seed-corn that will prevent the attacks of mice and birds that will not also endanger the germination. This danger will be considerable in the use of the caustic fluids that you mention. In his work on "The Cereals in America," Professor Hunt says that the application of coal tar is effective, but adds that there is danger of decreasing the germination. The best mode of protection against the mice is undoubtedly their destruction by the use of poison, for which purpose the poison supplied by the State Agricultural College for killing gophers is best adapted. This poison is a solution of strichnine with other substances to make the bait attractive to the mice, and is applied by soaking corn in the liquid, and placing the poisoned grain in the places that the animals frequent. This liquid does not appreciably affect the germination as has been found where the baits have been covered, as the corn seems to grow as well as where the poison is not applied. This poison is supplied by the college at the cost of making, \$1.10 per can, and will be shipped on orders enclosing the price. E. A. POPENOE,
Field Agent.

Kansas Experiment Station.

Seven Questions.

I want to know if it would be advisable to send to Manhattan or Hays City for seed-corn? Would it do as well here as it does there? Which is the best yielder, the yellow dent, white, or bloody butcher? What will be the cost per bushel? Do they test the corn they send out for seed at either place? Is there any difference in the way corn is detassled, whether by cutting or pulling? How can a person tell what the ground needs most of all?

Trego County. J. L. MANZER.

It would be advisable for you to get western-grown seed-corn. I do not think you can secure any seed from the Fort Hays Branch Station at this time. Corn grown as far east as this station will not succeed well with you the first season. I refer you to E. W. Albright, Brewster, Kans., as a Western grower of corn. As to whether the yellow, white, or bloody butcher type of corn will yield best will depend on whether the corn is bred and adapted for growing in your part of the State; also upon the variety. We make only general tests of the seed-corn which we send out; that is, we test the germination of a large batch of corn by taking a few kernels from a large number of ears. I have milled circular giving names of varieties of corn which we have for sale, with price of seed per bushel.

In detasseling corn it is better to pull the tassels than cut them off, as by cutting off the tassels you are apt to injure the leaves. The objection to detasseling by pulling is that the stalks are often so high in this part of the State that the top is not easy to reach, but in Western Kansas this will not usually be the case. About the proper time for detasseling, namely, just when the silks are beginning to appear and the tassel are fully formed, the tassels pull very easily.

I do not fully understand your seventh question. You probably refer to the use of manure and fertilizers. As a general answer regarding the use of fertilizers in Western Kansas, I would not recommend the use of chemical fertilizers. What our Western lands require more than anything else is more humus and organic matter. This can be supplied by dressings of barnyard manure or by growing crops for green manuring. One of the best crops of the annual legume class to grow is cow-peas. This crop may be planted in June and plowed under as green manure in the latter part of summer, or the crop may be used for pasture, or taken off for forage, in which case it would simply be a crop in rotation and would not furnish so much organic matter and humus as when plowed under for green manure. Other ordinary crops may be used for green manuring such as wheat and rye sown in the fall and plowed under late in the spring, in preparing the ground for corn. Kafir-corn or other cultivated crops. Spring-sown crops such as barley, sorghum, Kafir-

corn, etc., may be used for green manuring, plowing the crop under early enough in the summer so that by harrowing and disking the land may be put into good condition for sowing wheat in the fall. A thorough system of crop rotation put into practice and carried out in your part of the country will keep the land in better condition for producing large crops and at a less expense than any other method of cropping and fertilizing which I can recommend. It will not pay at the present time to use chemical fertilizers on our western land for growing ordinary crops such as wheat and corn. I enclose copy of my notes on crop rotation which may be of some assistance to you in introducing a system of cropping which will improve and maintain the fertility of the soil. A. M. TENEYCK.

Spring Crop to Precede Alfalfa.

What do you advise sowing for a spring crop on ground which it is intended to seed to alfalfa next fall? Please give directions for seeding alfalfa, and inform me where to purchase good seed.

J. SCHROLL,
Lincoln County.

Good crops with which to precede the sowing of fall alfalfa are wheat, oats, barley, millet, field-peas, cow-peas, or cultivated crops, such as potatoes or early corn which can be taken off early enough so that a good seed-bed can be prepared by disk and harrowing before the last of August or first of September when the alfalfa should be sown. Cow-peas are a very excellent crop with which to precede the sowing of alfalfa. The peas may be sown from the first to the middle of June with an ordinary grain-drill in a well-prepared seed-bed, sowing in drills eight to twelve inches apart. Harvest the crop for forage and prepare the seed-bed for sowing alfalfa by disk and harrowing.

As a rule, I prefer to disk and harrow in preparing for fall seeding of alfalfa rather than to plow late in the summer or early in the fall. Even in grain stubble, unless the ground is too weedy, disk and harrowing will be preferable to plowing. However, if thought desirable, the stubble ground should be plowed soon after harvest and a seed-bed prepared by harrowing at intervals until seeding time. Also it is desirable to use a sub-surface packer in order to pack and pulverize the soil and secure a well-settled, finely pulverized seed-bed. A seed-bed for alfalfa should not be loose and mellow below the point at which the seed is planted, but should be rather firm below the seed and mellow but finely pulverized above the seed. Care should be taken to conserve the soil moisture and to sow when the ground is in the best condition for germinating the seed and starting the young plants.

A. M. TENEYCK.

Field-Peas and Oats.

I have planned to seed my last year's corn-field to Canada field-peas and oats next month.

I read a copy of the report of the meeting of the Kansas State Board of Agriculture which said that Canada field-peas should be plowed under, say four inches deep. I have interpreted that statement as meaning the ground should be cleared of all trash, the peas sown on the ground and then plowed under, making but one plowing. Am I right?

I am doing this for both fertility and forage. I think the report said two bushels of peas to the acre. I shall, however, plant one bushel each of peas and oats.

J. A. MASSA,
Wyandotte County.

I believe a good method of planting field-peas is to plow the ground first four to eight inches deep, as may be your custom, and after preparing a good seed-bed plant the peas with the grain-drill in drills six to twelve inches apart. It is well to plant rather deep, probably three inches deep in a well-prepared seed-bed. I have never tried the method of plowing under peas, and although I have no doubt that this would give good results where the crop is grown especially for fertilizer or green manure, yet you would hardly get so even a stand of peas or so large a crop as by preparing the seed-bed and planting the peas as described above. It is usual to plant about two bushels of peas per acre when sown broadcast or in close drills for forage or green manure. It would not be necessary to remove the trash from the ground provided you plan to plow the peas under. Simply scatter the peas broadcast or go over the ground with the drill in order to distribute the seed and then plow, taking care not to plow the peas under too deep. After plowing, it would be well to give a thorough harrowing in order to pulverize the

soil and put it in good seed-bed condition for starting the peas and growing the crop.

Your method of sowing field-peas and oats together for forage is a good one. This is preferable to sowing peas alone because the oats hold the peas up, making it easier to cut the crop with a mower. A bushel of peas and a bushel of oats per acre make a good combination, although it may be desirable to sow a little more than a bushel of oats, say a bushel and a half of oats and a bushel of peas.

A. M. TENEYCK.

Cure Alfalfa in Cocks.

EDITOR KANSAS FARMER:—I notice several suggestions as to the best method of curing alfalfa hay in this part of the country, where rains are common during the season for cutting it. Most farmers seem to require large sheds or some other too expensive form for an ordinary farmer with a small piece of alfalfa.

When I was a boy on a farm in New England, I was taught that the proper way to put up red clover was to put it up in cocks as soon as the dew was off and it was slightly wilted, and let it cure in the cocks; if necessary we opened it up once or twice to prevent it spoiling, depending upon the weather, of course. We were always provided with covers about three feet square to go over these cocks in case of a shower or a rainy day.

Would this not be a simpler and less expensive method for the ordinary farmer? I have had my experience with alfalfa and I hope to profit by some other person's experience.

Kansas City, Mo. E. E. HOLMES.

Sows Alfalfa in Early Spring.

EDITOR KANSAS FARMER:—As it is nearing the time for spring sowing of alfalfa I thought it might be of interest to some of your readers to give you a little of my experience.

I have 100 acres of alfalfa, and every acre a perfect stand and it is said to be as fine a field as there is in Kansas. My alfalfa was all early spring sown, 70 acres in 1902, 20 acres in 1903, and 10 acres in 1904. My field is rich, level, Medicine River bottom. The field was literally full of cockle-burs. I commenced plowing very early in March, plowing seven to eight inches deep and followed each day with harrow, then cross-harrowed, rolled, harrowed and rolled again. I then sowed about twenty pounds of the best seed per acre, with an end-gate, broadcast seeder and lightly harrowed after seeder. I sowed the latter part of March. The alfalfa came up in a few days and was 7 to 10 inches high before cockle-burs made an appearance; but when they did come they were as good a stand as the alfalfa. The burs finally caught up with the alfalfa and all were about knee-high. Then a very close mowing was commenced and pushed until the whole field was gone over. Both burs and alfalfa were a quick, sappy growth and were allowed to lay on the field as the mower left them. The hot sun dried them up wonderfully and the alfalfa sprang up at once and there has not been a bur in the field since. I mowed twice and got considerable good hay at each cutting. Does any one suppose that if I had waited until all danger of frost had passed I would have succeeded? No, the burs would have come up with the alfalfa and smothered it out.

On 20 acres of this sowing the ground froze hard enough in one night to bear up a horse, with the alfalfa partly through the ground, but it never hurt it. Alfalfa is about the first vegetation to start in the spring and it stands to reason that it should be sown early in order to get ahead of weeds; then constant and close mowing will do the rest. I do not harvest fifty pounds of weeds in a summer's cutting (4 crops). I usually harrow thoroughly in early spring and fight gophers continually. The price of keeping a good alfalfa-field is eternal vigilance.

I delight in sowing alfalfa on weedy ground—but look out for grassy land. I think the only way to get a stand on grassy land is to sow early in fall; then in spring it gets such a start of the grass that it keeps it down. But on grassy land with spring sowing, the grass saps and weakens the alfalfa until it often dies, because mowing does not kill the grass but does kill weeds. I allowed 40 acres to seed second crop last year and thrashed 172½ bushels of fine seed and sold it for \$8 per bushel. From this 40 acres I cut a heavy first crop, then seed crop, and last a splendid third crop for hay. When I cut the first crop there were millions of worms. They resembled cut-worms and under the shocks and windrows one could rake them up by the peck. I had a few hogs running in the field and noticed

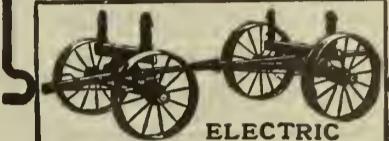
YOU **Can Save a Lot of Work!**
Can Save a Lot of Money!
Can Increase Your Comfort!
Can Increase Your Profit!

If you are interested in those things we'd like to send you our new book about

ELECTRIC STEEL Wheels
and the
ELECTRIC Handy Wagon

More than a million and a quarter of them are in use and several hundred thousand farmers say that they are the best investment they ever made. They'll save you more money, more work, give better service and greater satisfaction than any other metal wheel made—because they're made better. By every test they are the best. Spoke united to the hub. If they work loose, your money back. Don't buy wheels nor wagon until you read our book. It may save you many dollars and it's free.

ELECTRIC WHEEL CO.,
Box 46 Quinby, Ills.



\$7.00 Daily Av. selling Only Pump Equalizers
Make all pumps work Easy. Windmills run in slightest wind. Fits all
Pumps. Merit sells them. Fully War-
anteed. Exclusive territory. Write
Equalizer Mfg. Co., Waseca, Minn. Dept. 13

FENCE **MADE** **Strongest**
en-tight. Sold to the Farmer at Wholesale
Sale Prices. Fully warranted. Catalog free.
COILED SPRING FENCE CO.,
Box 255 Winchester, Indiana.

Wire Fence 29c
48-in. stock fence per rod only
Best high carbon coiled steel spring wire
Catalog offences, tools and supplies FREE
Buy direct at wholesale. Write today.
MASON FENCE CO. Box 62, Leesburg, Va.

LAWN FENCE
Made of Steel. Lasts a life-
time. We have no Agents.
Sold to users at Wholesale Prices.
7 cts. a foot up. Cheaper
than wood. Catalogue Free.
KITSELMAN BROTHERS,
Box 399 Muncie, Indiana.

"The Best of Prophets"
of the future is the past." The
first Page Fences built have been
in use 20 years and are still good
fences. We make better fences
now than ever before: Use
stronger wire, heavier cross-
bars, thicker galvanizing. Write.
PAGE WOVEN WIRE FENCE CO.
Box 7856, Adrian, Mich.

New way to smoke meat in a few hours with
KRAUSER'S LIQUID EXTRACT OF SMOKE
Made from hickory wood. Delicious flavor
Cleaner, cheaper. No smokehouse needed. Send
for circ'v. E. KRAUSER & BRO., Milton, Pa.

IWAN'S POST HOLE AND WELL AUGER
Best earth auger in the world. For Fence and
Telephone Post Holes, Wells, etc. Three times
the work ac-
IWAN any other. Makes
hole smoothly and
quickly; empties easily; is very durable. Used by U.S. Gov't. 8, 6, 5,
6, 7, 8, 9 and 10 inch. \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample
at special price to introduce. Agents Wanted. Inquire of dealers or write
direct for particulars. **IWAN BROS.** Dept. No. 1, Streator, Ill.

\$10.00 Swap Food | **\$14.00** Gated
Swing Mill. We manufacture all sizes and
styles. It will pay you to investigate. Write
for catalog and price list.
CURRIE WIND MILL CO.
Topeka, Kansas.

WELL DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS. Ithaca, N. Y.

A THRIFTY GARDEN

whether large or small, needs proper tools for
seeding and cultivating. We make garden imple-
ments of all kinds, a tool for every purpose.

MATTHEWS' NEW UNIVERSAL

Hand Seeders and Cultivators
singly or combined with Hoes, Plows, Rakes,
Markers, etc. Over 20 styles.
FREE BOOKLET giving de-
scription, prices and valuable
information mailed to any ad-
dress. Send for it now.

**GARDEN TOOLS FOR
EVERY PURPOSE**

AMES PLOW CO., 42 MARKET ST., BOSTON, MASS.

IT WON'T COST YOU ONE CENT.

The Grain Belt Harrow Cart Pays For
Itself in One Season.

Why wear yourself out dragging
behind a harrow in the dust and over
the clouds, when you can ride for
nothing, do more work in a day and
better harrowing. Its all in the
proposition we have to make you.

**WRITE US TO-DAY FOR
OUR FREE BOOKLET.**

Write
the
WATERLOO HARROW CO.,
933 Bridge St., Waterloo, Iowa.

THE KANSAS FARMER

Bietz Lanterns

You never heard a man who carries a Dietz Cold Blast Lantern complain of a leaking oil pot. It's solderless, it's tested by air pressure, leaking is an impossibility. Count on your fingers the things you think a lantern should be: Convenient, safe, long burning, never blow out, cleanly, no smoking or sootting, convenient locking levers—they are all in the Dietz. Then the greatest feature of all, the one everybody knows about and everybody prizes, is the

"Clear, White Light of the
DIETZ."

You ought to know all about the lantern you buy. We want you to know all about the Dietz Cold Blast. Our lantern book will explain. It's free. Shall we mail you a copy?

R. E. DIETZ COMPANY,
67 Laight St., NEW YORK CITY.
Established 1840.

**BOWSHER****FEED MILLS****Let Us Quote You a Price
On a FIRST-CLASS FANNING MILL**

200,000 CHATHAM MILLS are in use today. They are doing the work. Many of them were sent to these users on the 30 day free trial plan. We will send you one to try, too.

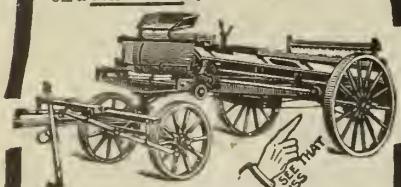
If it does not clean grain and seed, separate the good from the bad, and improve every bushel to your entire satisfaction, send it back and we will refund every cent of your money. We pay all freight. Now we could not make this offer if we did not know The Chatham will satisfy you.

Anyway, send to-day for our free book entitled "How to Make Dollars Out of Wind," a book on good seed, how to obtain it.

THE MANSON CAMPBELL CO. Ltd., Detroit, Mich.

**Before you buy that
Manure Spreader**

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader
has all these important features and many others equally as important. Write to-day for free catalogue and special prices and terms.

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U.S.A.

Working a steady gait with two men operating the press, we run 50 bales per hour, averaging 88 pounds. V. S. Cantrell, Vernon, Kans.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1004 Jefferson St., Topeka, Kansas.

that they were working very industriously at windrows and shocks, and on close inspection I noticed the hogs were feasting on worms. I then bought 160 head of shoats and put them in the field (it is hog-fenced) and they soon cleaned up the worms. When the seed-pods were beginning to ripen I noticed the hogs were eating them. I put the hogs in the feed-pen, fed them on corn and hay a few weeks, and sold them at a great profit.

My experience is to sow weedy land in early spring, and grassy land in early fall. Of course weedy land could be fall-sown. Our worst trouble here in fall-sowing is lack of moisture. I always sow broadcast. The seed is evenly put everywhere on the ground, while drilling puts it too thick in the drill-row and there is too much space between rows without seed. In the drills it is crowded too closely for rapid growth. I do not under any conditions want a nurse-crop; simply nurse the alfalfa by constant attention.

Barber County. M. T. WILLIAMS.

Success With Alfalfa at Small Cost.

EDITOR KANSAS FARMER:—As it is nearing the time for alfalfa-seeding I will venture a few suggestions to those interested in the matter.

The usual labor and expense is so great and the failures so numerous that the farmer though admitting the great value of an alfalfa-field, is deterred from making the attempt to secure the prize. I will risk the statement as a preface to my suggestions that a stand of alfalfa can be secured as cheaply and as surely as a stand of oats.

I will consider first the usual causes of failure. My experience and observations convince me that nine-tenths of the failures come from plowing and late spring sowing. In all but the eastern third of the State fall-sowing is impracticable, on account of prevailing fall drouths and grasshoppers. Freshly plowed ground is no more fit for alfalfa-seeding than for blue-grass or other grasses. You can seed an old road-bed easier than a nicely prepared garden bed. Never plow, no matter how forbidding your land looks. Any stubble- or corn-field on your farm is now ready for the coming spring seeding. It needs no years of training. You need the alfalfa and you can not afford to wait. "Do it now" should be your motto.

Now is the time to break down, rake and burn the weeds and corn-stalks. Then about the middle of March harrow until you have an inch or so of loose earth. If the corn ground is ridged, disk lightly so you can harrow down level. Now you are ready for seeding.

The best implement for seeding is an old-fashioned shoe-drill with seeder attachment. The attachment will cost about \$6 and your neighbors will want to hire the drill when you are through and you will soon have your money back and the drill for future use. The disk and hoe-drills run too deep and you had better broadcast. Get the best seed. Don't consider the price.

Now the time of seeding depends somewhat upon the season. I would say about March 20 in the southern counties of the State and on up to April 10 in the northern tier. If anything hinders you from seeding before April 10 don't seed at all but wait till next year. The chances are against your getting a stand after April 10. I have seeded every month from March to October and got a good stand; but the conditions must be all in your favor if you sow out of the proper season. In the early spring there is always sufficient moisture to bring up the plant. I got a good stand on twenty acres one of the driest seasons ever known in Kansas.

The weeds and grass do not bother early sowing. They do not start thickly till about May 1 and at that time the alfalfa is four to eight inches high, with vigorous, ample roots and no amount of dry weather and weed-choking will kill it. You may if you like broadcast on a March or April snow and it will cover itself. If you use a drill, seed six pounds to the acre. If you broadcast, use eight pounds. One pound of seed will give seven grains to the square foot. Four plants to the square foot is a good stand. If you ask why I sow 40 to 60 seed grains to the square foot I answer I do not know. Ask the fellows who put 140 grains to the square foot. I have sowed 20 pounds and 6 pounds of the same kind of seed on the same day with all the conditions the same and there seems now to be no difference in the stand. It all looks well. If too much seed is sown, I suppose that in time there will be worked out the survival of the fittest and your stand will be about the average. But sow no more than necessary and your

plants will be more vigorous to withstand dry weather and weeds. When you broadcast cover with slanting-tooth harrow. The plan I have suggested has always brought me success, while plowing and waiting till danger of frost is past brought me failure and depleted purse.

As to cost, the items are about as follows:

	Per acre
Preparation	\$.04
Sowing .....	.25
Covering .....	.15
Seed	1.00
Total	\$1.80

The old way of seeding cost, for

	Per acre
Plowing and harrowing.....	\$1.75
Sowing .....	.25
Covering .....	.15
Seed	2.50
Total	\$4.65

This shows the difference between the cost of success and failure.

C. B. DAUGHTERS.

Planting Corn and How to Raise It.

JOHN D. ZILLER, HIAWATHA, KAN.

[This essay was awarded first place in the essay contest on "Planting Corn" which was conducted under the auspices of the Kansas State Corn Breeders' Association in 1905, winning the prize, a Victor corn-planter, donated for this purpose by Fuller & Johnson Mfg. Co., Madison, Wis.]

THE SEED.

The first and most important part in raising a good corn crop in my estimation, is pure seed, seed that is bred for a purpose and with a fixed standard and type of purity. If you do not have it, send and get it from some reliable seed-corn grower, one who grows his own seed, and not from a merchant who buys his seed-corn by the car-load from Tom, Dick and Harry who do not know a pure-bred ear of seed-corn when they see it. If there is one thing that contributes more than another to the attainment of success in farming, or one thing that is absolutely necessary in agricultural success, it is the knowledge of pure seeds.

My effort as a breeder and grower of pure seed-corn in the last eighteen years has been to get the heaviest yielder and best feeding corn grown. Having tested a great many varieties, I know from experience what I am talking about. For illustration: If I send to some seed-corn grower for pure seed-corn, and after the crop is grown it is impossible to tell the type of corn I planted from a very inferior corn, I discard it and say, the man I bought the seed from don't know anything about breeding and selecting seed-corn. Like will produce like, in corn the same as in pure-bred stock. If he had bred that corn right and kept it pure, the crop would show.

In selecting seed-corn with many farmers, the main object had been to get seed that would grow. This is important but it is only one of the several important matters to be considered. A thorough knowledge of what you are planting, so you will get what you want after it grows is the question that should be decided. There is no question but that the annual yield of corn in the great corn-belt would be greatly increased by careful selection and change of seed-corn to one of the standard improved varieties.

THE SOIL.

We all agree on clover sod or new ground as the ideal place to raise corn, but we can not have this every year; and again it is absolutely impossible to lay down a fixed rule about plowing up new ground of meadows, for we often have to keep our meadows and pastures two or three years longer than we want to on account of not being successful in getting more land seeded down. There is one thing we can all do and all have, and that is fall plowing. From experience, my judgment is that it is best to plow in the fall all we can for corn. I have never had a failure on fall plowing. By plowing it in the fall and putting under a crop of trash and stalks, by spring it is all nicely rotted, and the soil has a better chance to freeze and pulverize, also to store up an abundance of moisture for the next summer's crop. This soil will stand the drought and also excessive wet weather better than spring plowing, and work a hundred per cent nicer.

I have often heard farmers say they would plow more but want to pasture the stalks. In my opinion there are few fields of stalks that are worth what the fall plowing would be to the next crop. Just as fast as one field of stalks is husked I cut the stalks and plow them under about six inches deep. I keep the plows going till the ground

is frozen so I can not plow; then we all husk corn.

"Too dry to plow" is an old expression among the farmers. Let me tell you how to plow when they say it is too dry. The first thing you do, throw away your old half-worn plow-lays and go and get new lays put on, and I will guarantee you can plow and do a good number-one job, and no other kind pays. Whenever a plow-lay gets worn out so a farmer can not do good work in dry ground, it is time for a new one, and any farmer can pay for one in horse flesh and the difference in plowing on every ten acres he plows. Next, keep your plow sharp; this as a very essential part in good plowing. Another very important part in raising a good crop of corn is barn-yard fertilizer. I make it a point to keep all manure cleaned up around stables and yards and hauled out over the ground, spread very thin, and before the ground is listed I go over it with the disk to pulverize it and work it thoroughly into the soil.

PLANTING THE CORN.

In the spring as early as the land will permit, I harrow the ground down level by riding the harrow, and by the time the ground is ready for planting the weeds have about all made their appearance; then I list in rows three feet and six inches apart.

One-half day behind the lister after the ground gets warm I commence to plant with a John-Deere, number-nine, edge-drop corn-planter, which is one of the most complete corn-planters I ever saw. It drops one kernel at a time 99 times out of a hundred.

To insure a perfect stand I put all seed-corn through a Graham, seed-corn sorter before planting to take out all round and imperfect kernels that are missed by shelling off the butts and tips, thereby insuring a perfect stand. One great mistake made by many farmers is planting corn too thick. This is one cause of so many barren stalks and nubbins. One kernel in a place every 18 to 20 inches is enough on ground that has been corned for two or three years, and 16 to 18 inches on new ground or stubble land will bring more corn and better quality than closer.

CULTIVATING THE CORN.

It is almost impossible to lay down a rule to cultivate corn by, as the weather has a great deal to do with it. I use the Kirlin, two-row disk cultivator, the first time over, then harrow, then cultivate with a six-shovel riding cultivator. In shallow cultivation to keep the ground loose on top plow two or three times over as the corn or the ground needs, aiming to lay corn by with a fine loose mulch of soil to keep the ground from cracking open.

After forty-two years of constant corn-growing and eighteen years of pure-bred corn, I have this to say: the farmer that raises a crop of corn every year is the farmer that is coming to the front.

	Per cent
Pure-bred seed-corn.....	30
Planting at proper time.....	10
Ground in fine pulverized shape, fall plowed or rotated with other crops	30
Thorough cultivation	30
Total	100

Follow the above rule and you can raise a good crop every year.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Stock with inherent good qualities will make money on the same feed and care which with a scrub will bring only loss.

A hundred rods of fence on a farm above actual need becomes a tax on labor and material that may be better cut off by removing the fence.

It is not enough to say, feed the products of the farm as far as possible, but they must be fed in such a way as to give a profit and save the manure.

Animals of vicious habits should never be used for breeding-purposes, as vices are transmitted. By careful breeding in this respect the disposition of the animals can be positively controlled.

Unless young stock be well cared for and kept constantly growing and in thrifty condition during the whole year, it is poor capital and will inevitably entail loss upon the owners.

For growing alone blue-grass is one of the very best grasses that can be grown on the farm. Once established it will withstand heavy trampling and close clipping with less damage than any other grass.

None but the brave deserves the fair.—Dryden.

SAVED \$100.00



MR. B. J. KENDALL CO.,
Gentlemen: — I have a \$100.00 horse that a friend of mine gave me for \$1.00 provided I would take him out of town and save him from pain, to have him hauled out when dead. The horse had Spavin, both shoulders, but your Spavin Cure brought him out all O. K.
Respectfully, L. G. Bird.

The remedy that endures, curing thousands of horses annually is

Kendall's Spavin Cure.

The standard cure for two generations of Spavins, Curbs, Splints, and all forms of Lameness.

Price, \$1; 6 for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. The great book, "A Treatise on the Horse," free from druggists or

Dr. B. J. Kendall Co., Enosburg Falls, Vermont.

**THIS SILO
\$9240**



We also have a plan to sell this silo, and all kinds of merchandise, to the farmer at per cent less than list price—and save him from \$150 to \$200 a year. Write for full particulars about it.

Write for special Silo catalog. Don't buy until you get it. CO-OPERATIVE SOCIETY OF THE NATIONAL SUPPLY CO., LANSING, MICHIGAN; CHICAGO, ILL.

The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS.

CAMPBELL SYSTEM FARMING ASSOCIATION

Membership \$5.00. Organized to educate farmers to use the Campbell System of soil culture. Dry Farming Magazine, edited by Mr. Campbell, \$1.00 per year, including Campbell's Manual. Send ten cents for sample copy today. Cash discount on Campbell machinery to members only.

The Campbell System Farming Association, 1715 California St., Denver, Colorado.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

March 13, 1906—40 Poland-China hds ws, and 45 Shorthorns, C. S. Nevius, Chiles, I. in March 13, 1906—Shorthorns and Poland-Chinas by C. S. Nevius, Chiles, Kans.

March 20-22, 1906—Combination sales of Shorthorns, Herefords, Aberdeen-Angus and Herefords at Kansas City; R. A. Ford, Manager, Lawson, Mo.

March 28, 1906—Shorthorns by Shawnee Breeders Association at Topeka State Fair Grounds, I. D. Graham, Secretary, Topeka, Kans.

April 3, 1906—Janes Stock Farm, Willard, Kans., trotting bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gifford, Wakefield, Kans.

May 18, 1906—Geo. Allen, Omaha, Neb., Shorthorns.

Feeding Questions.

EDITOR KANSAS FARMER:—I am a quarter-section farmer and keep only stock enough to pasture on about 40 acres. I keep some cows and raise their calves, and I fatten a few steers of my own raising every winter. As soon as cold weather sets in, I stanchion all my cattle, and about 20 head of calves, in a good barn with plank floor and tight manger. I feed cows that I milk and steers that I intend to fatten, cornmeal ground in a sweep-mill with one-third bran. Now, I would like to know if shelled corn would be better for the steers. Some say it does not pay to stable cattle, but when we clean the stable and haul out the manure, we go after a load of corn-fodder. Of course it is work to clean out, but I tell them it takes less feed.

I feed all the alfalfa hay my cattle can eat through the night; daytime I feed corn-fodder in the feed-lot and alfalfa, too, in mangers. I also raise about 10 acres of sweet corn every year for winter feed. I plant it thick with a planter on good ground. It grows 8 feet high. I husk out enough of the best for seed. It keeps a corn-binder pretty busy to go through it. Now, what are we going to do with the rats? Myself, boys, and dog have killed 77 since January 1, 1906. Can you tell me the best way to poison them?

Would it not pay better not to raise any sweet corn and raise all field corn, cut it all up and shred it to get it away from the rats? Corn shocks standing in the field all winter feed a good many rats. Long life and prosperity to the KANSAS FARMER. B. REICHERT.

McPherson County.

I rather doubt the advisability of confining fattening cattle as you are doing. The fattening steer is not so susceptible to cold as the dairy cow and quite a number of experiments in the stall-feeding of steers show that it is more economical to feed in open yards. Of course a wind-break or shelter of some kind is a great advantage. I do not think I would suggest any change in the ration which you are feeding to your milch cows and growing calves, but fattening steers, I believe, could be more economically fed on corn-and-cob-meal with alfalfa for roughage. I should prefer the corn-and-cob-meal to the shelled corn, although the cost of grinding is somewhat more than for shelling. If you have an abundance of good alfalfa hay, you should be able to get along with a very limited amount of bran or other purchased mill feeds. Alfalfa is a wonderful feed for all kinds of stock, and the farmer who has it is in a great measure fairly independent on the feed question. I see no special reason for growing sweet corn as you are doing. Field corn can be grown thickly in the same way for fodder and will produce larger yields per acre. Shredding fodder is certainly a very successful way of handling it and you will get more feeding-value from it and you will find it a great advantage in handling the manure. I hardly know what to suggest in the way of getting rid of rats. I am trying to solve that problem myself and find it a difficult matter. You might try poison if you could do it so as not to endanger other animals. The zoological department here prepares a special poison for gophers, prairie dogs, etc., which is also recommended for rats. This is sold at the bare cost of preparing.

G. C. WHEELER.

Texas Fever in Cattle.

A publication will soon be issued by the U. S. Department of Agriculture on the subject of Texas fever, a disease which has been a very serious obstacle to the development and prosperity of the cattle industry of this country, especially in the South. Some years ago it was conclusively proven by the experts of the Bureau of Animal Industry, after extensive investigations, that this disease, which is also known as

splenic fever and Southern cattle fever, is transmitted by the cattle tick, and that without this Texas fever tick there would be no Texas fever. Later experiments have been made with the object of determining the best method of eradicating the ticks and preventing the disease. The results of these various investigations are presented in Bulletin No. 78 of the Bureau of Animal Industry. The bulletin contains valuable information for stockmen concerning practical methods for eradicating the Texas fever tick from both the animals and the pastures, and also describes measures to be adopted for the prevention and treatment of the disease itself.

Copies of this bulletin may be had by applying to the Bureau of Animal Industry, Washington, D. C.

Rape—Underground Silos.

I would like to have some one who has had experience with rape, tell whether it is good forage for brood sows, pigs, and hogs in general and will cows eat it?

I have sixteen acres of bottom-land that I want to plant in rape if feasible; if not I would like to know. I have forty acres of rye and will sow twenty acres of oats for the hogs.

Will alfalfa keep in a silo and is a silo 15 feet underground as good as one on top of the ground?

CHARLES SMITH,

Kay County, Okla.

The rape plant (*Brassica Napus*) is without doubt one of the most useful forage plants introduced into the United States. It has been grown for forage in Europe and Great Britain for fully two hundred years. It bears a very close resemblance to the rutabaga in its early stages of growth. It does not grow a fleshy root, but sends out rootlets in all directions into the soil and is considered to draw heavily on the soil, but as it is usually pastured off by animals the soil is not greatly depleted of its fertility. It is an annual plant, and while there are several varieties, the Dwarf Essex is best adapted to the conditions in the United States. The seed is all imported at present. It is best adapted to moist conditions and a moderately cool climate. In your section it will undoubtedly be of value if planted early in the spring. The sixteen acres of bottom-land you refer to will undoubtedly be rich enough and moist enough to yield large quantities of forage. It will grow best in rich, moist, and free-working soils, not doing so well on stiff, clay soils. The seedbed must be well prepared and as clean as possible. It should be sown early, either broadcast or in drills. Where it is the sole crop and sown broadcast, three to five pounds of seed are required per acre. If drilled in rows, one or two pounds will be sufficient. In from eight to twelve weeks after sowing it will be at its maximum growth for pasturing. Hogs should not be turned upon it while it is small or it will be destroyed. You speak of sowing oats for hog pasture and I would suggest that rape and any of the common cereals may be sown together to advantage. It will also do well for hog pasture sown with sorghum. If you pasture it off before it has reached its maximum growth it will produce a second growth. The amount of the second growth depends upon the richness of the soil and the character of the season. If allowed to become too old and tough, you may find that your hogs will refuse to eat it. You will find it better to turn the hogs on when it is from eight to twelve inches high. We make a practice here at the college of plowing up all of our feed-lots in the spring and sowing them to rape, thereby getting much forage from what would otherwise be useless ground during the summer season. If the season is favorable, we practice sowing a succession of crops so as to have a new patch coming on to take the place of the one pastured off.

Cows will eat it but care should be taken that they are not turned on it with empty stomachs. There is danger of bloat in cows or sheep if such care is not taken. It is also liable to taint the milk of cows, hence is undesirable pasture for milch cows.

Alfalfa may be placed in a silo in the green state but is a little more difficult to keep than corn as it does not settle so compactly, hence a greater loss takes place from spoiling on the surface and down the sides. Alfalfa silage has been made at the Kansas Experiment Station for the past three years, and is being fed to the dairy cows at the present time. It is advisable to tramp it very thoroughly around the edge while filling and it is also a good plan to have some corn silage to run in on top to aid in settling it. Silage may be made in an underground silo as well as one on the



Antiseptic Remedy

For Family and Farm

SLOAN'S LINIMENT

KILLS PAIN.

Dr. EARL S. SLOAN,

615 Albany Street, Boston, Mass.



Dipolene

WILL SAVE YOU DOLLARS

By preventing loss and sickness among your farm animals. Time to save is before loss occurs. Keep your live stock free from disease. DIPOLENE will do it. It kills disease germs, destroys ticks, lice, fleas; cures sheep scab, mange, mange. Protects against mosquitoes, and keeps stock in a healthy, sanitary condition. It's easy to use, powerful, SURE AND PURE, DEATH TO DISEASE but perfectly harmless to animals, hair, feathers or wool. A gallon makes 100 gallons dip. Write for price and FREE book, "DIPPING FOR DOLLARS."

MARSHALL OIL CO.,
Marshalltown, Iowa.

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other live stock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.

Manufacturers of Dipping Tanks. 1501-03 Genesee St., Kansas City, Mo.

Bog Spavin

Cure the lameness and remove the hump without scarring the horse—have the part looking just as it did before the hump came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little liquid required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists,

212 Union Stock Yards, Chicago, Ill.

PINK EYE CURE FOR HORSES AND CATTLE

Shre relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when applied.

Address orders to W. O. THURSTON, Elmdale, Kansas.

ground. There are objections to the underground silo, the chief of which is that it is a serious problem to get the silage out. There is also danger of gases forming which would be fatal to human life in a silo placed in the ground as you suggest.

GEO. C. WHEELER.

[It is suggested that you send 10 cents to the Silage Manufacturing Co., Salem, Ohio, for their book on "Modern Silage Methods," mentioning the KANSAS FARMER. It is an exceedingly valuable work on the subject besides containing feeding tables and other valuable information for the stock feeder.—Editor.]

Slaughter Tests of Hog-Feeding Experiments at Kansas Agricultural College.

The animal husbandry department of Kansas Agricultural College has just completed a hog-feeding experiment and marketed the hogs at the Chas. Wolf packing plant in Topeka where slaughter tests have been obtained of the different lots.

There were ten hogs used in each lot and the experiment began October 9, 1905, ending January 29, 1906, a period of 112 days. The object of the test was to determine the value of tankage and alfalfa hay as supplement feeds with corn. The following table gives the results as to weights and gains and cost of feed and grain:

No. of lot.	Pigs in lot.	Weight Oct. 9. 1905.	Weight Jan. 29. 1906.	Total gain lbs.	Ave. Daily gain lbs.	Total lbs. feed eaten.	Total cost of feed.	Cost of gain per cwt.
I	10	1290	2400	1110	1.00	Cornmeal 7690	\$48.05	\$4.32
II	10	1275	3250	1965	1.75	Cornmeal 7848 } Tankage 1552 }	\$80.07	\$4.07
III	10	1310	2510	1320	1.18	Cornmeal 7875 } Alfalfa 1340 }	\$54.53	\$4.13

Fed 112 days.
Feed prices—Cornmeal 62½ cents per cwt.; tankage \$2 per cwt.; alfalfa \$8 per ton.

The hogs were shipped to the packing-house and brought the following prices: Lot I. \$5.32½ per cwt., lot II. \$5.40 per cwt., lot III. \$5.35 per cwt.

When the carcasses were sufficiently cooled they were cut up in the presence of representatives of the animal husbandry department. Every facility for obtaining the necessary data was freely provided by J. B. Nicholson, superintendent of the plant, a special cutting being made of these three lots in order to allow more time for the work.

Dr. De Wolf, the Bureau of Animal Industry expert stationed here as inspector, pronounced the whole bunch as unusually healthy. The lymphatic glands were all large and soft and only one case of parasitic infection of the liver was found.

They all had more leaf lard than the average hog. The amounts for the different lots were as follows: Lot I. 90 pounds, lot II. 94 pounds, lot III. 90 pounds. Although the hogs in lot II. were heavier and seemed fatter on foot, the leaf lard was but slightly greater than in the other two lots.

Mr. Nicholson stated that the flesh and fat of lot II. seemed firmer than the others in the warm condition. The hogs fed alfalfa hay showed a very fine quality of lean flesh and the fat was not so heavy on their carcasses. The percentage of dressed weight for the three lots, not including the heads was as follows: Lot I. 76.6 pounds, lot II. 73.5 pounds, lot III. 76.1 pounds.

Dr. S. C. Orr of Manhattan secured some very fine photographs showing the different cuts from all three lots which will be used when the results of the experiment are published in detail by the Kansas Experiment Station.

Out There in Kansas.

I. D. GRAHAM BEFORE THE KANSAS IMPROVED STOCK BREEDERS' ASSOCIATION.

Kansas people love their State. They believe in it. They like to talk about it. It is a delight to live in it and yet a constant marvel to all its residents. The common, every-day facts of Kansas become hyperbole in other States. Her history is written in capitals. From her broad and fertile plains her farmers produced in 1905 agricultural products to the value of \$238,818,666, and possessed live-stock worth \$169,821,157, or a total of \$408,639,823 as a result of their labors. They grow big men in Kansas to follow the greatest of all human callings, agriculture.

And there are some big things "out there in Kansas." Some of them are the biggest things of their kind in the world. For instance, Kansas has the largest Agricultural College in the world. It is located at Manhattan, and enrolls 1,600 students annually. It has more students in its four-years' course in agriculture than have the agricultural colleges of Iowa, Illinois, Michigan, Wisconsin and Missouri combined. It has more graduates and former stu-

dents in Government employ than any like institution. E. R. Nichols is president.

Kansas has the largest agricultural experiment station in the world. It is located at Hays, and includes 4,500 acres, devoted solely to experiments in agriculture. It is a branch of the Agricultural College Experiment Station at Manhattan and is under the control of its board of regents.

Kansas has the largest Improved Breeders' Association of any State in the world. Its membership numbers about 1,000 of the State's brightest and best farmers and breeders. It holds annual meetings at the State Capitol in January. H. A. Heath, Topeka, is secretary.

Kansas has the largest county breeders' association in the world. The Marshall County Hereford Breeders' Association has a membership of 60 men and women, each of whom owns a herd of Hereford cattle. F. W. Preston, Blue Rapids, is the secretary.

Kansas has the largest herd of home-bred Aberdeen-Angus cattle in the world. This is the Sunflower herd, belonging to Parker, Parrish & Miller of Hudson. It numbers 325 pure-bred animals that were all bred at home.

Kansas has the largest Berkshire breeding establishment in the world. This belongs to E. D. King of Burlington, and numbers more than 100 brood sows with a product of some 1,200 pigs each year. There are larger

It Will Pay You To Investigate

the merits of the

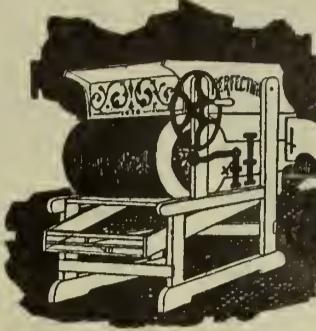
"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.

\$



\$

This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305 Kansas Avenue, Topeka, Ks.

Get This Plow

It will save yourself and your team hard work. It will do better work than any other and will do more in the same length of time because it is equipped with time and labor saving devices. The spring on the locking device holds plow down in hard ground. Plow can be set in lock or off lock as desired and will always work perfectly. The foot lift works so easily, by the aid of a powerful spring, that a boy can operate it when the plow is in the furrow.

THE

Fuller & Johnson Quality



SPRING LOCK HIGH FOOT LIFT

SOIL CULTURE
BOOK
FREE



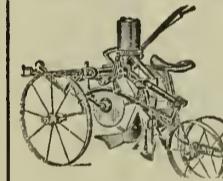
of this plow is a guarantee that it will last a generation or more. Your sons will use it after you. Double Skinned and reinforced wherever there is wear and strain. The share is made of soft center steel with a hard surface that will scour in any soil. But before you buy this plow or any other plow, send for the book,

Money Making Methods in Soil Cultivation.

It tells how to plow under different conditions, what style of plow to use, when and how to harrow, list, plant, cultivate. It is the only book of this kind ever compiled and it is simple, practical and easily understood. It is Free for the Asking, and will help every farmer who reads it. You'll keep it as a ready reference. Address

Fuller & Johnson Mfg. Co., 119 Dickinson St., Madison, Wis.

Get This Book Free



The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

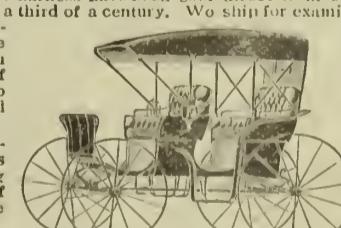
Rock Island Implement Co.,
1310 West 13th Street. - - - KANSAS CITY, MISSOURI



33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price.

We are the largest manufacturers in the world selling



to the consumer exclusively. We make 200 styles of vehicles, 65 styles of harness. Send for large free catalog.

ELKHART CARRIAGE & HARNESS MFG. CO.,
ELKHART, IND.

No. 328. Extension Top Surrey. Price complete, \$78.00. An good an sells for \$25. more.

GET THE BEST-TOWERS' SURFACE CULTIVATORS
for corn, kaffir-corn, cotton, tobacco, sorghum,
& potatoes, beets and other vegetables.

THREE SIZES: for two rows or one row—three horses, two horses or one horse.

"My corn cultivated with a "Tower" made 15 bu. per acre more than my neighbor's (40 bu.) on exactly same kind of ground; my ground is now clean, his weedy." J. W. Wellenstein, Ponca, Neb.

Free Treatise on Surface Cultivation introductory prices where we have no agents.

J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.

Ideal Sport
A Fine Day
A Good Dog
and



STEVENS FIRE ARMS

It's just as natural for a girl to want to shoot as for a boy. It does her just as much good. Gives her healthy, invigorating outdoor exercise, quickens her eye, steadies her nerve, and makes her self-reliant.

Catalog Free

describing "Stevens" guns of every sort and style, for hunter, marksman, girl or boy. 140 pages. Sent free to any one interested in guns, sending 4 cents in stamps to cover postage. If your dealer cannot supply you write to us.

J. STEVENS ARMS & TOOL CO.
125 High Street
Chicopee Falls, Mass., U.S.A.

at the facts as presented by the country at large. They speak to us with emphasis because they represent our own condition as well.

COMPARATIVE AVERAGE BY YEARS.

	1905.	1904.				
No. of sales.	No. sold.	Average price.	No. of sales.	No. sold.	Average price.	
Shorthorn	82	\$3.512	65	2,755	\$101.25	
Hereford	24	1,179	28	1,481	117.10	
Aberdeen-Angus	22	1,084	30	932	132.80	
Galloway	5	190	85	133	143.55	
Polled Durham	1	34	231.75	7	286	100.00
Red Poll	3	94	109.80	1	48	70.00

The few big things mentioned here are only given as samples. Kansas has only just begun her real, active life as a State, but she began right. Kansas now stands in the very front rank of States in her low rate of illiteracy and her high rate of morality. Only one Kansan in each 2,000 of her population is a convicted criminal, and her population came from the ends of the earth.

Of her possibilities in the future nothing need be spoken. Man was never endowed with a fairer heritage than that enjoyed by the Kansan and the possibilities are in his hands.

Dogs and Sheep.

A reader in a Southern State advises us that he is going extensively into sheep now that the Legislature of his commonwealth has passed a dog-tax law creating a fund to recompense farmers for sheep killed by dogs. At the same time comes a letter from an Ohio reader, commanding a position taken by this journal, and urging it to make a campaign for a dog-tax law in every State. The Buckeye State has a dog law, but under its enforcement we understand the poor man's dog escapes taxation, and it is usually the cur of the poor man which does the sheep-killing. A man who owns a good dog will offer no objection to a tax to be turned into a fund for the protection of flockmasters. He knows his dog is worth the cost of the tax. No man has a moral right to keep a cur dog. Such a dog produces no profit to the owner, and is a menace to sheep and sometimes to human beings. The maintenance of useless dogs on the farm or in the city should be discouraged by a tax. While a man has a legal right to keep a cur, so long as it is not a menace to the community, he should be discouraged from so doing by a tax that will contribute toward a fund for the payment for sheep killed by dogs. The administration of the dog-tax law and the equitable distribution of the fund in case of killed or worried sheep is a hard problem to solve practically, but every effort should be made to protect flockmasters from the ravages of farm or town-kept dogs.—Breeder's Gazette.

The Avery Percheron Sale a Record-Breaker.

The closing-out sale of Henry Avery & Sons, held at Manhattan, Kans., last Saturday was a great event. There were buyers present from Arizona, New Mexico, Colorado, Nebraska, Iowa, Illinois, Missouri, and other States. The sale was scheduled to begin at 12.30 p.m., but long before that time the large sale pavilion was packed to the limit and many people were unable to gain entrance. Colonel Woods held the block while Colonels Harriman and Brady worked in the ring. The bidding was lively and the horsemen who wanted animals were not afraid to bid because they knew the offering was one of the best ever given to the public.

The two great brood mares, Mina 31721 and Lena 40417, brought \$1,125 each, going to Jas H. Tangeman, Newton, Kans. Bosquet 40105, their great black herd stallion, went to J. H. Peak, Manhattan, Kans., for \$2,825. The average price brought by the stallions was \$568.75, which is a remarkable price considering the fact that six of these animals were under yearlings. The average price for 26 mares was \$549.61, which is also remarkable from the fact that five of them were less than a year old and one, a grade Percheron, sold for \$207.50. J. H. Tangeman, Newton, Kans., also purchased the mare, Belinda Belle 40989, for \$1,000, and Altestis 40990 for \$650.

Kansas has the most extensive potato-grower in the world. This is J. W. Groves, of Edwardsville, whose son is a graduate of the Kansas Agricultural College and whose crop in 1905 was 72,150 bushels. He is a colored man.

Kansas has more than one-half million acres in alfalfa and if she is not now the largest alfalfa-producing State in the world, she soon will be.

Kansas has the brightest, most progressive and most energetic people in the world. They are the people who do things. They are optimists, every one of them. They are always full of hope and faith and this is justified by their works. Even in the depressed condition of the cattle industry, through which we have just passed (and I believe we have passed it), her breeders have never lost faith but have continued to turn out the best.

Not many will forget the previously unknown Shorthorn bull from Kansas that stood in the short leets at the American Royal of 1904, then topped the sale and afterwards won the first prize and the championship in the great International Live Stock Show at Chicago. In spite of the depression, Kansas breeders have held on and the indications now are that they will soon have their reward in the return of prices that more nearly represent the real value of their animals.

The following figures representing pure-bred cattle sales are quoted from the Breeder's Gazette of Chicago, which has unrivaled opportunities for getting

Anthony 43066 to H. J. Ulrich, Scranton, Kans. 410.00
Fontana 43054 to A. L. Robinson, Pekin, Ill. 250.00
Aiglon by Illustrate 20489 to L. E.



CONGO ROOFING

A better Ready Roofing than Congo is not made.

It looks like rubber, feels like it, acts like it in everything, but it wears like iron.

It does not crack, buckle nor creep, but remains pliable and elastic.

Tropical heat or icy blasts have no effect upon it—winds and rains may beat upon it without injury.

It's acid, alkali and water proof.

It's price is low—which is one of its most attractive features.

Write to-day for free Sample and Booklet.

RUCHANAN-FOSTER COMPANY
484 Chestnut St. Philadelphia,

Mary Anne 16564 to J. T. Mowser, Lost Springs, Kans.	385
Valtine 33897 to D. E. Reber, Morristown, Kans.	725
Maud 40539 to W. E. Reber	700
Mahaia 20180 to B. A. Packard	520
Celestine 41396 to Geo. R. T. Roberts	505
Beulah 35662 to N. Kreihberg, Springer, N. M.	410
Brunette 17393 to E. W. Lee, Harveyville, Kans.	310
Neva (substituted for Sylvia) to H. T. Heneman	440
Clofate Carlock 22076 to S. C. Strum, Herington, Kans.	500

THE WICHITA SHORTHORN SALE.

The Shorthorn breeders' combination sale, or more exactly, the fifth annual sale of J. F. Stodder, of Burden, who was joined by S. C. Hanna, of Howard, and Marshall Bros., of Burden, was held at Wichita following the Robison horse sale. While a number of the animals offered were young stock, the average throughout was highly satisfactory. The top price of the sale was for Mr. Stodder's Scotch show cow, Ceres, which went to W. S. Combs, of Yukon, Okla., for \$675. The top price for bulls was realized in the sale of Mr. Hanna's Cruckshank bull, Symmetry, which sold for \$300 to C. W. Francis, Runnymede, Kans. C. A. Shields, of Derby, Kans., got a great bargain in the Bates-bred bull, 8th Waterloo Duke of Karney, consigned by Marshall Bros.

SUMMARIES.

J. F. Stodder's consignment:	
23 cows and heifers brought	\$2,920.00
Average	127.00
12 bulls brought	1,370.00
Average	114.16
S. C. Hanna's consignment:	
2 cows brought	320.00
Average	160.00
3 bulls brought	865.00
Average	288.34
Marshall Bros.' consignment:	
7 cows brought	590.00
Average	84.34
2 bulls brought	300.00
Average	150.00
Combined averages:	
32 cows brought	3,825.00
Average	119.40
17 bulls brought	2,535.00
Average	149.12
49 head brought	6,360.00
General average	130.00
Highest price (Ceres)	675.00

The principal buyers of Shorthorns were: J. H. Cooper, Union City, Okla.; Henry Burline, Caldwell, Kans.; S. W. Stewart, Alden, Kans.; Fred Walton, Sterling, Kans.; W. S. Combs, Yukon, Okla.; B. A. Packard, Phoenix, Ariz.; R. A. Stewart, Hutchinson, Kans.; L. J. Work, Carmen, Okla.; A. L. Barnard, Belle Plaine, Kans.; F. W. Heaton, Coats, Kans.; C. W. Askew, Utica; M. H. Lyons, Fort Reno, Okla.; M. L. Hollenbeck, Pontiac, Kans.; A. R. & J. C. Hamilton, Roswell, N. M.; J. C. Gifford, Eldorado, Kans.; C. C. Trostol, Nickerson, Kans.; W. A. Price, Anthony, Kans.; Newell Bros., Stafford, Kans.; D. H. King, Nickerson, Kans.; H. M. Hill, LaFontaine, Kans.; C. W. Francis, Runnymede, Kans.; F. E. Grimm, Runnymede; Thos. Murphy, Caldwell, Kans.; C. S. Chaffin, Preston, Kans.; C. A. Shields, Derby, Kans.

THE HEREFORD SALE.

Following the Shorthorn sale, the Hereford breeders' combination sale was held but did not hold its own in rank with the other sales. A number of the offerings were not in suitable sale condition, which had a tendency to bear the prices, more than the breeding of the animals seemed to warrant. Robt. H. Hazlett, of Eldorado, sold four young bulls at an average of \$160. The highest price of the sale was for Steele Bros.' cow, Day Dream, which sold for \$205 to B. A. Packard, of Phoenix, Ariz.

The principal buyers at the sale were: J. P. Sands & Son, Walton, Kans.; John Gosling, Kansas City, Mo.; Thos. Taylor, Belvidere, Kans.; B. A. Packard, Phoenix, Ariz.; E. H. Davis, Norwich, Kans. The foregoing list of purchasers took the entire tops of the sale.

SUMMARIES.

23 bulls brought	\$2,375.00
Average	103.26
16 cows brought	1,665.00
Average	87.70
42 head brought	4,040.00
General average	93.95

Are you thinking of buying a carriage or a buggy, or a harness? If so, be sure to write to the Elkhart Carriage and Harness Co., Elkhart, Ind., and get a catalogue. You can then select what you want with the assistance of every member of the family. This company is now in its thirty-third year of manufacturing and selling direct to the consumer. The guarantees are ample and are made by a responsible company.

A Poland-China Record-Breaker.

The Bollin & Aaron sale at Leavenworth on February 22, was another record-breaker. The 22 sows bred to Nemo's Dude, selling for more money on an average than any like bunch of sows bred to one boar, in the history of the hog business in the State.

The entire sale was good. All of the offering were bred to the boars on the above-named gentlemen's farms. No outside reputation was bought to help lift the average, it being a public sale made expressly to dispose of the product of these good breeding farms. This proves that Poland-Chinas can be bred, reared, and sold in the ordinary way at the very best prices if the breeding, merit and mating of the offering is right, and the sales advertised are conducted in an honorable legitimate way. The list follows:

No.	Price.
1. L. Calhoun, Potter, Kan.	\$100.00
2. A. G. Wyatt, Florence City, Neb.	150.00
3. L. Calhoun	155.00
4. C. S. Moore, Nortonville, Kan.	110.00
5. James Malins	57.50
6. A. P. Rearidon, McLouth, Kan.	55.00
7. A. Jones, Rosedale, Kan.	57.00
8. A. P. Rearidon	57.00
9. John Harvey, Maryville, Kan.	132.50
10. H. J. Northup, Frankfort, Kan.	120.00
11. E. H. Anderson, Kearney, Neb.	50.00
12. M. C. Vansal, Muscota, Kan.	50.00
13. Sandquist Bros., Oakland, Neb.	54.00
14. C. O. Fimpay, Fontanelle, Neb.	52.50
15. H. M. Kirkpatrick, Wolcott, Kan.	46.00
16. R. H. Hargrove, Nettleton, Mo.	40.00
18. John Murphy, Bonner Springs, Kan.	26.00
19. J. R. Young, Richards, Mo.	20.00
20. C. M. Pritchard, Leavenworth, Kan.	35.00
21. O. N. Thorson, Everest, Kan.	21.00
23. Joe McEvoy, Leavenworth, Kan.	16.00
27. C. R. Ryan, Leavenworth, Kan.	20.00
29. E. L. Marshall, Bonner Springs, Kan.	14.00
30. John Forge, Leavenworth, Kan.	16.00
31. G. G. Clement, Ord, Neb.	70.00
32. Dietrich & Spaulding	64.00
33. J. C. Meese, Comstock, Neb.	152.50
34. L. Calhoun	50.00
35. A. Johns	60.00
36. C. S. Moyer, Nortonville, Kan.	45.00
37. H. M. Graves, Atchison, Kan.	41.00
38. L. Calhoun	68.00
39. J. M. Devennery, Cameron, Mo.	50.00
40. J. W. Henninger, Potter, Kan.	60.00
41. A. Johns	52.50
42. H. M. Kirkpatrick	39.00
43. J. M. Devennery, Leavenworth	45.00
45. R. H. Hargrove	47.00
46. John Harness, Leavenworth, Kan.	35.00
47. A. Johns	64.00
48. A. P. Rearidon	36.00
49. John Murphy	27.00
50. H. M. Kirkpatrick	31.00
53. M. C. Mansell	28.00
54. M. C. Vansal	38.00
55. A. H. Robertson, Clark, Mo.	38.00
56. J. M. Ross	35.00
58. A. Johns	32.00
59. W. R. Davis	20.00
60. W. R. Vansal	17.00

The total was \$2,700. The sows bred to Nemo's Dude averaged \$81. The entire sow offering averaged \$60. Six boar pigs averaged \$20.

Gossip About Stock.

Write Samuel Drybread for catalogue of the combination sale of cattle and hogs of the beef and lard herds at Elk City, March 17, 1906. Some excellent stock will be sold. The consignors are some of the best breeders of the locality. Address S. Drybread, Elk City, for catalogue.

Wyatt Stanley, of Anthony, Kans., has for sale three fine Percheron stallions, and if you are in need of one write him for full particulars. Mr. Stanley is one of the oldest breeders in the country, having bred Percheron horses for fifteen years at Stronghurst, Ill., before coming to Kansas.

Geo. Hebbard, of Peck, Kans., who has one of the good herds of Poland-Chinas, topped the Caldwell sale of Poland-Chinas at \$105 for the good young sow, Perfect Meddler. Mr. Hebbard has been getting good results from his advertisement, recently receiving an order for 8 head from a KANSAS FARMER reader.

L. L. Vrooman, owner of the Rose-lawn Herd of Hereford cattle and Du-roc-Jersey swine, which was established at Hope, Dickinson County, Kansas, has recently purchased a farm near Topeka and may be addressed hereafter at Route 8, Station C, Topeka, Kans. The breeding fraternity will be pleased to welcome Mr. Vrooman to the ranks of prominent breeders in Shawnee County.

The Marshall County Hereford Association will hold its annual sale at Blue Rapids, April 5. The offering consists of 27 bulls and 13 cows and heifers consigned by the following well-known breeders: Miss Lou Goodwin, A. Borek, Brown Brothers, E. R. Morgan, F. W. Preston, L. P. Larson, Geo. E. Miller, McKee Brothers, and W. A. Gilson. Mention the KANSAS FARMER and write F. W. Preston, Blue Rapids, for catalogue.

Albert King, of McPherson, Kans., is offering an attractive proposition to real-estate investors. Mr. King offers to bona fide purchasers a number of farms in Sherman County, Kansas, at from \$5 to \$15 per acre on easy terms. This land is owned by the company he represents, and when you buy it you save the expense of paying three or four real-estate men's commissions. Read his advertisement in this paper.

Hon. B. P. Waggoner, State Senator in the second district, was a heavy buyer of the best things in the Leon Calhoun Poland-China sale last week at Atchison. Mr. Waggoner is a great admirer of good stock and is equipping

his splendid farm, 5 miles southwest of Atchison, with all modern conveniences for handling stock and is stocking it with registered horses, cattle, and hogs. Having filled many positions of honor and trust we predict a bright future for him in the stock business.

The Brown County Improved Stock Breeders' Association will hold a Shorthorn sale at Hiawatha, Kans., April 5. The offering will consist of 50 head of males and females consigned by Jas. P. Lahr, Sabetha, Kans.; G. Y. Johnson, Willis, Kans.; T. J. Sands, Robinson, Kans.; Geo. Mantle, Faucett, Mo.; E. D. Schuler, Falls City, Neb.; J. F. Stricker, Highland, Kans.; and Everett Hayes, Hiawatha, Kans., who is secretary of the association. Their catalogue will soon be ready for distribution. Mention the KANSAS FARMER and write for one.

W. J. Honeyman, Madison, Kans., writes that on account of changing his farm location he is selling his herd very close, letting many go in the sale that he had expected to retain. He sells a number of daughters of Chief Perfection 2d. One is the good sow, Chief's Orphan 5th, the dam of one of the best boar pigs sold in the Kansas sales last year. Others are by Corrector 2d, Truant Boy, Chief Perfection 3d, and other great hogs, all well bred and good individuals. Nearly all are bred to U. C. Perfection. One is bred to Perfection E. H., that was first at the Iowa State Fair 1905. The boar, U. C. Perfection, is producing a lot of the kind expected from a first-prize State Fair winner. His get have been bought by the best breeders at the fall sales and are extra good sellers in the brood-sow sales being held. Mr. Honeyman is one of the good breeders who buys and breeds the good ones. Write for catalogue addressing him at Madison, Kans. Send bids to J. D. Snyder of the KANSAS FARMER.

C. S. Nevius, owner of the Glenwood Herd of Shorthorn cattle and Poland-China swine at Chiles, Miami County, Kansas, has out his catalogue for his first annual sale of Shorthorn cattle and bred Poland-China sows to be held at his farm on Tuesday, March 13, 1906. This offering of Shorthorns includes his entire 1905 show herd of ten head, and the offering as a whole comprises as much fashionably bred and prize-winning Shorthorn blood as was ever offered by any breeder in the State. The sale will be held on Mr. Nevius' farm, where most of the cattle were bred and cared for. Buyers can "see the whole works"—an advantage worth considering. Other notices will go into the detail. To better follow it, please get a catalogue. Mention the KANSAS FARMER in writing Mr. Nevius. Those who like a big, stretchy Poland-China will be interested in the hog sale the forenoon of the same day (March 13). The sows will be sired to Designer, the best finished son of Expansion the writer has ever seen. Ask for separate catalogue for the hogs.

L. M. Monsees & Sons, Smithton, Mo., are selling one of the greatest lots of jacks and jennets in their 28th annual sale at Limestone Valley Farm that was ever offered at public sale. It has been said by one who knows the stock, "Don't come to the sale unless you want to buy good jacks and jennets, because if you do you will be disappointed, as nothing but good ones will be sold." They are all good, although some are better than others; but all are of that high degree of quality that has made the herd so famous. Don't fail to be on hand early the sixth, or better the day before. Messrs. Monsees leave no stone unturned to make this annual event pleasant and profitable for their guests. The stock sold by them that day is of the kind that will produce profits that will help make the future days more pleasant. It is a little late to get a catalogue but it is not necessary, as the breeding is right and the individual merit of the offering is of the same quality as the bunch that made the greatest of all prize-winning records at the great St. Louis World's Fair. Remember the place, Smithton, six miles east of Sedalia, Mo., the time, March 6, 10 a. m., 1906.

J. R. Young's On and On sale of brood sows March 7, is to be the meeting place of the East and the West, the North and the South—all in friendly competition for the best bunch of sows, breeding and individual merit considered, and bred to the greatest of all the recent champion sons of the lamented Keep On, and the old champion, Successor, that were ever offered in one sale. Mr. Young has spared no time or expense in getting this great offering together. The sows are of the cream of the greatest sales of the year, selected by the fieldman and auctioneers representing Mr. Young, bought without limit as to price but with the admonition to be sure of the breeding and individual merit, and are beyond criticism. To realize how well their policy has succeeded this offering must be seen, as word of tongue or pen can not portray the offering as it would appear on inspection. Be sure to arrange to attend, or if it is an utter impossibility to be Mr. Young's guest that day, either follow his example and instruct your representative to buy what you want without limit, or be sure to place the limit high enough to get what you want. The experience of this year proves that the man who has an On and On litter will be assured a good sago next fall. Richards, Mo., the place; March 7, the time; J. R. Young, the host. Be there.

Zenoleum Veterinary Adviser. A copy of this interesting and well-printed book containing sixty-four pages of valuable advice, prepared by the leading veterinarians in the world for live-stock owners, and printed at a great expense by the Zenner Disinfectant Company of Detroit, Michigan, will be sent to you and to your friends, upon request, absolutely free of all cost.

If you want a copy of this book, send your name and address to the Zenner Disinfectant Company, 61 Bates Street, Detroit, Michigan, at once. Do not wait a minute. Do it now.



THE DIFFERENCE BETWEEN A GOOD ROOF
& OTHERS IS
Amatite

Can a durable satisfactory Ready Roofing be made at a low price? We say yes, and offer you Amatite.

Low price in most things means poor quality—unless there is some special circumstance—and in the case of Amatite there are special circumstances that enable you to get the very best Ready Roofing at the lowest price.

Years of experience have taught us that there is only one way to make a roofing that is both cheap and durable. That is by using coal tar pitch as the waterproofing agent in combination with wool felt. Pitch is the lowest priced material known that is adapted for protection against water. That it is the most durable, is proved by tests of thirty years in actual use. If pitch is used, it is really possible to secure a cheap, durable, ready roofing. There are other materials besides pitch that will make a satisfactory roofing, but they all cost very much more. None of them is as good as pitch, for pitch is ideal. Water is absolutely ineffective against it, both chemically and physically.

We are the largest manufacturers of coal tar pitch in the world.

Our many years of experience enable us to make a ready roofing out of pitch, and this is something that only this

company is equipped to do to advantage.

So we can offer Amatite Roofing—made of pitch and wool felt in a practical form at so low a price.

To obtain its equal you must pay at least twice as much.

Compare its cost at your dealers, weight for weight—for that is what counts—with the cost of its rivals.

Roughly speaking, a roll of Amatite equals in weight (and durability) the three-ply or four-ply grade of any roofing which is not made of pitch. But its price is usually less than half.

Don't be deceived into thinking that Amatite can't be lasting because its price is on a par with flimsy, lightweight roofings.

Amatite would sell on its merits at double its price. We prefer to keep to a normal profit and to make big sales.

You, Mr. Purchaser, get the benefit!

We should like to send you a free sample, just to show what a solid, practical, weather resisting roofing you get when you buy Amatite.

A postal card will do. Address the Barrett Manufacturing Company, New York, Chicago, Cleveland, Boston, Allegheny, St. Louis, Minneapolis, Philadelphia, New Orleans, Kansas City.

BLACKLEGOIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

Nodose to measure. No string to rot. Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVIS & COMPANY. DETROIT, MICHIGAN, U.S.A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U.S.A.; Walkerville, Ont.; Montreal, Que.

Buy Fence Direct from Factory



It is the most satisfactory and most economical method of buying. Most economical because, in buying direct, you cut out all unnecessary handling and all profits of go-betweens. This makes quite a saving.

Most satisfactory because you have so much larger a line to select from. We make 26 styles and heights of fence besides gates and stretchers.

The Continuous Stay gives Advance Fence its superior strength. It preserves and utilizes all the strength of the wire, about half of which is wasted in fences with cut stays.

30 Days Free Trial. If after receiving our fence you do not like it and it is not exactly as represented in every way you can return it to us at our expense and your money will be refunded.

We prepay freight to any steam R. R. station in the U. S. on 40 rods or more and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices.

Advance Fence Co., 3771 Old Street, Peoria, Ill.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free mention this paper.

DEPARTMENTS:

Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of the Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the Inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of the Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in the Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

"Blind Staggers."—We have a disease among our horses that we do not understand; they first go blind and seem crazy, and run over anything in their way. Some die within an hour, some live for twenty-four hours; only one got well. They are dying all over the country; the horse that is getting well was bled in the neck and given linseed oil and turpentine. What is the disease and cause? H. P. C.

Palco, Kans.

Answer.—Under separate cover we have sent you a bulletin regarding the trouble to which you refer. The bulletin is too long to copy in this column.

Diseased Tooth.—My 4-year-old sorrel mare has a yellow, offensive-smelling discharge from left nostril for the last eight or ten days. She eats well and seems all right other ways. There is no swelling about the head. I thought it might be from a diseased molar, but from the way she eats hard corn it can hardly be that. She had several attacks of distemper last summer, and an abscess may have formed. No treatment has been given. What can I do for her? X. X.

Answer.—From the nature of the discharge I would judge that it came from a diseased tooth and would recommend having a competent veterinarian examine the animal and locate the affected tooth, as the pus has probably collected in one of the cavities in the head and then discharged into the nose.

Barbed-Wire Cut.—I have a horse that was cut on barbed wire just below the fetlock, last July. It healed pretty well but the flesh grows in a ridge along the cut, and runs some—also causes a liquid with a bad odor to cover the surface under the fetlock. I have used lunar caustic on the proud flesh, washed with carbolic-acid water and then applied air-slaked lime. It does not heal fully. What would you advise? H. L. M.

Eldorado, Kans.

Answer.—I would advise your cutting the proud flesh out of the wound and then searing with a hot iron; then heal the wound with any of the astringent powders that you may find at a drug store. If none are available, have the following prescription filled and use it: Two ounces of iodiform, 1 ounce of boracic acid, 1 ounce of acetanilid, 1 ounce of tannic acid and 2 ounces of pulverized starch; mix and dust on the wound daily.

"Blind Staggers."—Will you kindly send me press bulletin in regard to blind staggers? Nearly every one in this neighborhood has lost horses with this so-called disease and I would like to learn something about the cause and cure. F. B. S.

Stafford, Kans.

Answer.—We have mailed you the press bulletin you desire.

Ring-Bone.—My coming 3-year-old bay filly has an incipient ring-bone on left hind leg just above hoof; she is not lame but the enlargement shows quite perceptibly. A neighbor suggests that she may outgrow it. What do you think? S. T. H.

Pleasanton, Kans.

Answer.—I would suggest that you secure from your drug store a fly blister, say 4 ounces, and blister the ring-bone every three weeks until you have given four applications. Allow the blister to act about 48 hours then wash off and grease. While the blister is acting keep the animal's head tied short enough that she can not reach the foot.

Lame Mule.—I have a coming 4-year-old mule that is subject to lameness in right front foot or leg. I can not tell which. He will get lame suddenly and be lame for from three to five days and then get all right, and probably be so for two or three months, then become suddenly and violently lame again. I can find no blemish or swelling or anything that looks as though it would cause lameness. Sometimes I see him in the pasture resting

his right front foot with tip of hoof on ground; he has been this way for 15 or 18 months.

W. C. C.

Cheney, Kans.

Answer.—The symptoms you give of the animal resting the toe would suggest the lameness being located in the back of the foot, the change in position being made to relieve the pressure from the tendon. You had better have some one who can give the animal a thorough test examine carefully those parts to locate the exact seat of the trouble.

Lice.—We have a cow that is bothered with lice; I never saw any like them. They bury their heads in the skin, and resemble a tick in shape. I have tried several remedies for their removal but have failed. Can you give me a good remedy? C. E. J.

Omaha, Neb.

Answer.—We have sent you under separate cover a press bulletin on the preparation and use of lime-and-sulfur dip which we trust you can use with favorable results. The bulletin is too lengthy to publish in this column, and will be sent to any one having similar trouble in their stock.

Bunch at Hock Joint.—My 3-year-old colt, weight 1,200 pounds, has a soft bunch at hock joint, the size of a walnut; it is on the outside and can be pushed through in front; is there anything I can do for him? He has been worked some, but has never been lame.

Shaw, Kans.

S. L.

Answer.—A liniment containing considerable tincture of iodine rubbed thoroughly into the enlargement will be beneficial in removing it; such as 4 ounces of tincture of iodine, 2 ounces of capsicum tincture, and arnica tincture, 2 ounces; mix and apply to affected part daily.

Lameness.—My 2-year-old bay filly received a hurt while in pasture last summer. She was very lame in left hind leg, and we noticed a small running sore on the round of stifle next to flank; there was some swelling around the joint and she was very lame for two weeks, then the sore healed and swelling went down, and apparently she was all right; but in the course of a month it was noticed that she was a little lame; she stands with her foot turned back, and has grown worse the last month; we had to help her up yesterday. The sorest spot seems to be below the stifle joint. We have bathed it with Gumbault's Caustic Balsam.

I have a black mare that is always rubbing and scratching while in stable or in the lot. I can find no lice on her, but there is a scab or scurf in the hair next to the skin. She is falling off some in flesh.

N. J. G.

Langdon, Kans.

Answer.—The running sore from the stifle has evidently come from an opening into the joint. You had better use an astringent powder on the running sore, which can be obtained from any drug store, by having put together 1 ounce of tannic acid, 1 ounce of boracic acid, and 2 drams of powdered alum.

Ailing Pigs.—I would like to know the cause of the death of two pigs which I lost this week. They heaved as though they had thumps, and would fall over and apparently have fits. After death they frothed and bled at the mouth. They were about 4 months old and in good condition and ate well until the day before they died. I have two more affected with the same trouble.

J. G.

Ottawa, Kans.

Answer.—Pigs that are badly affected with worms, until the entire intestine is filled, give the symptoms you describe. Better examine the ones affected and put them out of their misery. If worms are the trouble, preventive treatment should be followed. Will send you a prescription (bulletin) by mail which the Government has been using very successfully and I think will help keep the hogs in good condition.

Scours in Shoats.—Some of my shoats have scours. I had them on sowed rye, and fed shorts slop and corn. I thought it might be the rye that caused the trouble so turned them off, and have fed nothing but corn for several days, and to-day find another with the complaint. After being affected a few days, they get thin and weak and do not eat much. I should like to know the trouble and what to give them.

Ottawa County, Kans. J. C. S.

Answer.—Would advise your discontinuing the corn entirely for the affected pigs, and give listerine in doses of a tablespoonful every three hours in half a pint of milk, to each hundred pound hog. Would advise feeding the rest of the hogs rather carefully on corn. A little bran fed to hogs when they have bowel trouble is often ad-

vantageous in remedying such conditions.

Fistula.—I have a mare that has had fistula for two years. She has been treated with different medicines, has a running sore on withers high up back of where the collar works, and a cavity between the shoulder blades. She has not been worked for 9 months; is 8 years old. I would like a remedy, also your bulletin.

W. T.

Wichita, Kans.

Answer.—We are sending the bulletin you desire on fistulous withers. You should open the abscess freely so as to get good drainage, and then follow directions in bulletin until it is healed. If you find that the tincture of iodine is causing too much irritation after using it for a couple of weeks, then resort to the use of tincture of calendula, a teaspoonful to a pint of water. Let us hear from you again if you have difficulty in treating this fistula.

Thin Stallion, and Blood Wart on Colt.—I have a colt that has a blood water on left side of body about size of a hen egg: what can I do to cure it?

I also have a 3-year-old stallion and I can't get him fat; he is in fair condition; what must I feed him to get him fat to sell in the spring?

Larned, Kans.

X. X.

Answer.—Burn the wart off with a hot iron and then heal up with some common disinfectant.

Give the stallion a condition powder. If none are available, have the following filled: 1 ounce of pulv. nux vomica, 2 ounces pulv. gentian, 6 ounces pulv. glycyrrhiza root, 4 ounces of common salt and mix with 10 pounds of oil-meal.

Ringbone.—My 10-year-old mare has had ringbone for perhaps 18 months. When taken from the barn mornings she goes lame at first. Can it be cured, and will it stay cured? I would like to cure it before spring work begins. I have not treated it.

G. B.

Holton, Kans.

Answer.—A fly blister applied to your mare's ringbone every three weeks until you have given about four applications will doubtless be beneficial in removing the lameness. The animal's head should be tied rather short while the blister is acting, as otherwise she is liable to get her mouth blistered in biting at the parts that are irritated. We are sending under separate cover a press bulletin on ringbone issued by the veterinary department of the Experiment Station at Manhattan.

Worms in Horses.—Will you inform me of some reliable remedy for worms in horses? Also full directions for us.

C. S. B.

Mt. Hope, Kans.

Answer.—The following prescription will be beneficial in removing worms: 1 ounce of pulverized nux vomica, 2 ounces of pulverized iron sulfate, 6 ounces of pulverized glycyrrhiza root, 4 ounces of common salt, 6 ounces of sulfur. Mix together and put in 5 pounds of oil-meal. A heaping teaspoonful twice a day in ground feed will be the proper dose of this mixture.

Lame Horses.—I have a 3-year-old mare that is lame in or above pastern joint or fetlock; it is swelled and sore to the touch; she hops around and when standing uses her toe; she is getting thin; she was the same way last summer; we used all sorts of liniments, and after three months she got well. She has not been in harness.

A 10-year-old road-horse got hurt last November just above the large pastern; it is swollen and hot. He limps some, and rests the leg when standing.

Should the chill be taken off the water for a horse with distemper?

Is there any cure for a horse whose pastern joint seems to push over the under part? It seems that the joint is too weak to keep it in place so the upper part of the joint pushes forward over.

H. B.

McPherson, Kans.

Answer.—I would advise using a liniment on the first horse that will not blister, such as spirits of camphor 4 ounces; tincture of belladonna 4 ounces; fluid extract of poke root 3 ounces; compound soap liniment 8 ounces. Rub on affected part twice daily.

The same liniment is also proper to use on the 10-year-old road-horse.

The chill should be taken off the water for a horse that has distemper; if the horse will eat bran mashes, it should have a hot bran mash at least once a day.

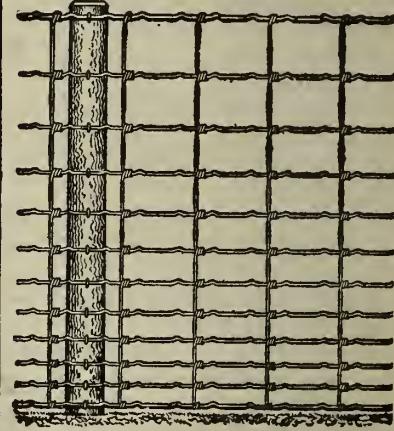
In regard to the horse with weak pastern, would advise considerable rubbing with a stimulating liniment—4 ounces of turpentine to 6 ounces of linseed oil with 2 ounces of tincture of cantharides. Shake well together and rub daily on the joint, with considerable friction.

C. L. BARNES.

American Fence Talks

American fence is a structure of hard, stiff steel wires, possessing great strength and flexibility, adjustable to uneven ground, sound, durable and guaranteed. Great improvements are continually being made over the fences of years ago. See the modern, up-to-date American fence, built of big lateral wires, with heavy upright or stay wires hinged—the most perfect structure for a square mesh fence.

The thirty plants of the American Steel & Wire Co. make every known grade of wire, from the stiffest wire for pianos to a wire almost as soft as silk for weaving into wire cloth. With these enormous facilities for manufacture and observation of the action of wire in all kinds of service, not only is the best wire made for the use required of it, but for less money.



It is Steel that makes possible the great modern structures like bridges, skyscrapers, locomotives and steamships that people confidently trust. Steel for wire is specially made and becomes stronger and more durable by drawing into wire and annealing. And when thoroughly galvanized by lately improved processes and woven into American fence, makes the most substantial structure about a farm. Properly put up and treated, it is a permanent and money-making investment for many years.

We sell through dealers all over the country. In this way, the buyers' interests are best looked after. Dealer then becomes your business friend and he will see that you are treated right. See him, examine different styles get catalogue and make selection to suit your requirements. Or, write us direct and we will send catalogue and tell you where you can get the fence.

NOT EXPENSIVE—Prices range from about 17 cents a rod up, according to height, style and location of your place.

American Steel & Wire Co.
Chicago
New York
Denver
San Francisco

MACHINE OIL

\$3.50 A BARREL

You will find it a better machine oil than anything you have been buying for 35 cents to 45 cents per gallon. Premium Oil is a natural oil, greenish black in color. There is no made oil that is superior to Premium Oil for engines, shafting, shops, elevators, threshing machines and farm machinery. It will not GUM, has good body, is not affected by hot and cold weather as most oils are. If a farmer, you say you won't need as much as a barrel. Get your neighbor to take half of it. But remember \$3.50 for a 50-gallon barrel, and the empty barrel is worth at least one dollar; gives you oil at less than 6 cents per gallon at your railroad station. If within 300 miles in Kansas freight will not be over 75 cents per barrel. Sample sent on request.

T. C. DAVIS, Benedict, Kans.

Benedict, Kans., August 26, 1905.
I have this day sold my interest in K. C. Dailey & Co. to T. C. Davis, who will hereafter conduct the business in his name. Signed, K. C. DAILEY.



High Grade Paints at Reasonable Prices

We use good mineral and pure linseed oil. We are also distributors for Wing's Fire Proof Oil Paints. Write for descriptions and prices.

KANSAS CITY PAINT COMPANY
1503 West 39th St., Kansas City, Missouri

When writing advertisers please mention Kansas Farmer.

The Grange

"For the good of our Order,
our Country and Mankind."
Conducted by George Black, Olathne, Secretary
Kansan State Grange, to whom all correspondence
for this department should be addressed.
News from Kansas Granges is especially solicited.

NATIONAL GRANGE
Master, Aaron Jones, South Bend, Ind.
Lecturer, N. J. Bachelder, Concord, N. H.
Secretary, C. M. Freeman, Tippecanoe City, Ohio
KANSAS STATE GRANGE.

Master, E. W. Westgate, Manhattan
Overseer, A. P. Reardon, McLouth
Lecturer, Ola Hibner, Olathe
Stewart, R. C. Post, Spring Hill
Assistant Stewart, Frank Wizwell Ochiltree
Chaplain, Mrs. M. J. Ramage, Arkansas City
Treasurer, Wm. Henry, Olathe
Secretary, George Black, Olathe
Gatekeeper, G. F. Kyner, Newton
Ceres, Mrs. M. L. Allison, Lyndon
Pomona, Mrs. S. M. Phinney, McLouth
Flora, Mrs. S. J. Lovett, Larned
L. A. S., Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE
Henry Rhoades, Chairman, Gardner
E. W. Westgate, Manhattan
George Black, Secretary, Olathe
J. T. Lincoln, Madison
O. F. Whitney, Topeka, Station A
STATE ORGANIZER
W. B. Obryhim, Overbrook

Kansas Binder Twine.

EDITOR KANSAS FARMER:—At the last session of the Kansas State Grange, held at Madison, Kansas, December 12, 13 and 14, 1905, a resolution was passed advising that I act as a committee to go to Lansing at my earliest convenience and investigate the twine plant at the penitentiary (as there had been so much complaint, either imaginary or real, as to the quality of this twine) and to learn if possible whether this complaint came from the farmers who had used the twine or originated from the twine trust, or from the implement dealers on purpose to injure the sale of the penitentiary twine.

On February 7, 1906, armed with a letter of authority and recommendation from the master and secretary, approved by the executive committee of the Kansas State Grange, I proceeded on my mission, and met the warden, W. H. Haskell, in his office. He was very busy, as the State board was then in session. I handed him my letter from the secretary of the State Grange, and after reading the same, he introduced me to each member of the State Board; after which his chief clerk, J. C. Brown, showed me through and explained to me in detail the workings of the plant in its entirety. First he showed me a room where they had in store 1,000,000 pounds of manufactured twine ready for shipment, and 1,000,000 pounds more of raw sisal in the hale ready to be passed through their many looms and vast machinery to get it ready to be spun into a strictly fancy article of binder twine. It was quite interesting to me to note the starting of the crude sisal from the bale into the first machine and from that to the second and so on, through a score of powerful looms until it was thinned down to the proper texture, strength and firmness in order to get it spun into an even grade of twine, after which it was passed over in baskets to the other side and there reeled into balls, then pressed and weighed, and the balls assorted until ten halls were found that weighed the exact 50 pounds. Then it was passed to the sacker ready to be stored away for shipments on orders. The superintendent made this statement: They had finally overcome all obstacles and impediments that used to annoy them and are now turning out every working day an average of 711,600 pounds of No. 1, pure sisal twine, as good an article as is sold in the State, for they use no shoddy. Now, with the meager appropriation of only \$150,000 per annum, they expect to turn out nearly four million pounds of No. 1 twine, equally as good as the trusts' so-called manila twine, at a less cost to the consumers, and the quality is fully guaranteed.

And now, farmers of Kansas, this twine plant belongs to you and the benefit you derive from its operation depends wholly upon the liberal patronage you give it. This twine plant, with a more liberal patronage and State appropriation, has a capacity sufficient to supply every farmer in the State with all the twine needed to bind his entire crop; so why not lay aside? This twine is not made under the contract system. It being a product of the State of Kansas, we should help it along by buying twine manufactured in our own State. If we can not get a reasonable profit, let the farmers of a neighborhood club together and send their orders direct to J. C. Brown, the gentlemanly superintendent of the plant who keeps a record of every transaction, the date of order received, by whom, and a detail of ship-

If you will eat more
Uneeda Biscuit
you can do more work, enabling you to earn
more money, so that you can buy more
Uneeda Biscuit
do more work and earn still more money.

5¢

NATIONAL BISCUIT COMPANY

ments out so it can be referred to at any time; and your order for 500 pounds, or a car load, provided the cash or draft accompanies the order.

Every subordinate grange can have its secretary send in orders if dealers will not handle it for them. In conclusion let me say that as a representative of the grange, a farmers' organization, I was treated very nicely by all the officials. They did all in their power to make my call a pleasant one and I hope that our people and the farmers generally will assist by their patronage and support in making this Kansas product a success.

A. P. REARDON.

New Lancaster Grange No. 223, Miami County.

New Lancaster Grange gave a public installation at their January meeting, closing with one of the famous grange feasts. This was our first attempt in this direction and it proved a great success. Past Master Elkington acted as installing officer and the beautiful ceremony was rendered without a hitch. A full corps of officers were installed for 1906, and our prospects for the future are bright. J. J. Clark was elected Master, F. B. Conner, Lecturer, and W. H. Grant, secretary. After the ceremony an excellent feast was served which in itself spoke well for the culinary art and cultivated taste of the sisters. At a late hour all went to their homes feeling that our first attempt in a social way was a success.

Brother J. R. Lemen, one of the delegates from Miami County to the State Grange at Madison, Kansas, and the writer were invited to visit Miami Central Grange located in Miami County. We accepted the invitation and visited with it on the evening of January 26. There was a large number in attendance and we were given a cordial welcome. Brother Lemen gave a very interesting account of his trip and the proceedings of the Kansas State Grange held at Madison, Kansas, in December. Short addresses were made by a number of the home members. Brother Lemen also communicated the annual ward after which the good sisters served an excellent supper. A member stated to me that we were the first visitors that ever attended their grange, and the fact that this visit worked great good to that grange, reminds us that there is not enough visiting done by the neighboring granges.

This grange is over two years old, has fifty members, and is contemplating building a new hall at once. It has a good territory, and we predict for it a great future.

I want to call attention of cooperative circles in the State to the remarkable showing made by Brother J. R. Lemen, manager of the cooperative store at New Lancaster, in the last twenty months. On a paid-up capital of \$2,000, he showed a net profit of over \$700. Mr. Lemen was a student of Ed Blair, formerly of Chillicothe, Kansas.

This grange is taking steps to introduce a bureau of information, whereby



Cheap Rate to California.

Californians raise gold—they don't mine much now. An easier way has been found than that! It is now obtained by farming. The alchemy of nature converts the oranges, lemons, olives, grapes, wheat, alfalfa and other products of the soil into good clothes, comfortable residences, and assuring bank accounts. 'Tis being done every day in California. Wouldn't it pay you to inquire into this? Better yet, why not go there?

Only \$25.00

From Topeka to almost all points in California and to many places in Arizona. Liberal stop-over privileges.

On sale daily, February 15 to April 7, 1906. Tourist sleepers daily on fast trains. Harvey meals.

For particulars, apply to

T. L. KING, C. P. & T. A.,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.

members may list articles they may have to sell, such as grain, stock, poultry, implements, etc. We believe it will help to further the principles of cooperation.

T. B. CONNOR,
Lecturer.

Grange Department of the KANSAS FARMER, asking in the name of Vinland Grange that you give this matter some of your valuable space.

CARL LINDSTROM,
Secretary.

Removal of Tax on Domestic Alcohol Made Unfit for Use As a Beverage.

EDITOR OF THE GRANGE DEPARTMENT:—Vineland Grange No. 163 has taken favorable action on the petition for the removal of the internal revenue tax on domestic alcohol, and desires the local press to take the matter into consideration and, if possible, is urgently requested to give this matter its editorial support, calling that by the support of the press, this matter will come before the people, and, if thoroughly discussed, will give the public a better understanding of the question, and will also be of much help to our members of Congress in their efforts to have this tax removed.

It is no longer a theory, but a fact, that alcohol is a great fuel, or a great saver of fuel in foreign countries, and can as well be applied in our home land. It has not only proven itself a saving in fuel, but it is also a channel through which the farmers with damaged grain can find a market thus making it profitable to the farmers directly, and to the whole country indirectly. There are hundreds of other uses for domestic alcohol which are retarded in this country on account of the high revenue. The principle one is its use for heating our homes. Gas, at the present time, is very satisfactory, but in alcohol we do not find the fumes which gas produces, and do not run the risk of explosion.

For the purpose of bringing this matter before the public, I send this to the

RESOLUTIONS FOR THE GUIDANCE OF MONA AND OTHER SUBORDINATE GRANGES.

Resolved: That we indorse the action of the National and State Granges at their recent annual conventions in unanimously adopting resolutions favoring the removal of the internal revenue tax from domestic alcohol, made unfit for use as a beverage, and,

Resolved, That the master and secretary are hereby instructed to sign the petition approved by the National Legislative Committee to affix the seal of the Grange, and send it with a copy of these resolutions, and of those passed by the National Grange, to our representative in Congress, in order that he may be informed of our desire for the immediate enactment of the legislation necessary to accomplish the purpose of these resolutions, and of our further desire that he should at once use his influence to that end, and,

Resolved, That copies of these resolutions be sent by the secretary, to the local press with the request that they give their editorial support to the movement and open their columns to the work of educating the public as to its importance.

No Snub Intended, Either.

"Do you have mails in this church?" asked the High Church visitor of the verger of the village church. "No, indeed," replied that dignitary with scorn. "We have oil cloth, and right up to the chancel, too!"—Wisconsin Church Life.

Home Departments

CONDUCTED BY RUTH COWGILL.

JOYS OF THE COUNTRY.

I would from the city's rule and law,
Its fashions and forms cut loose,
And go where the strawberry grows on
its straw.

And the gooseberry grows on its
goose;
Where the catnip tree is climbed by the
cat,

As she reaches for her prey,
The guileless and unsuspecting rat
On the rattan bush at play;
Where the cow on the fragrant cowslip
feeds

Where the dew on her dewlap lies,
And the dog to the waving dogwood
speeds.
And the bull to the bullrush flies.

—Exchange.

*Educated Motherhood.

FLORENCE SHAW KELLOGG.

IN TWO PARTS—PART II.

The wise mother studies each child as the horticulturist studies a new flower, and her education comes little by little to meet its need. There is scarcely anything of which she does not need some knowledge. She should strive earnestly to keep herself abreast of the times, that, as her child grows older, she may give him intelligent guidance and companionship. She should be able to sympathize with him in all his ambitions and have earnest part in all his life. She needs some understanding of chemistry and physiology to know what foods are best to build up a strong, healthy body; of botany and zoology to help him rightly appreciate the beautiful world in which he lives, the great work-shop of God (which thought so impressed Agassiz that he would never allow any levity among his students in his summer school on Penobscot Island, but required them to bring the same reverent spirit there, as investigators of God's way in nature, as to church); of mathematics that she may help him in his reasoning and in the solving of the many problems that can be demonstrated by "line and rule;" of literature that she may direct his reading and help him to find the beautiful treasures in song and story, and become familiar with the great minds of all ages, finding in them a comradeship most helpful, a solace for his weary hours, cheer and encouragement for his dark ones, and a spiritual and mental wealth of untold preciousness and worth; of history that she may help him to an understanding of the way by which we have come, and through what cost of life and treasure his home is assured to him. And thus I might go on through the whole list, giving to each subject its due meed of praise, for all are good and helpful to us in our work as mothers; and yet I can not say they are indispensable, for many a good mother, untaught of schools, ignorant of books, has proved them otherwise.

THE MOTHER INSTINCT.

While we fully acknowledge our need here, and the broadening, deepening influence of true education we must admit that there is, for the mother, a something more—a something better and more imperative even than this, a sweet motherliness—an intuitive understanding of the child and its needs that education may help wisely to direct, but can not supply if it be lacking. It is something hard to define or name, a God-given instinct, an enrichment of the soul, an education of the heart that must be, whatever else be missed. Having this, the mother safely guides her little flock over the shoals and quicksands into the safe harbors of true manhood and beautiful womanhood.

The mothers of many of our great men and women have been uneducated, as the world regards it, and yet how grandly they did their work! How deeply, how enduringly they impressed themselves upon the minds and hearts of those for whom they lived and worked! Take the mother and step-mother of Abraham Lincoln, with what would now be considered scarcely more than the rudiments of an education, yet what a work they did in that noble soul! How deep and lasting, how potent for all things high and holy was their influence. They were God-taught mothers—mothers who looked within and learned of the sacred things hid in their hearts, as in the hearts of all good women and men. It is motherhood personified, that wealth of love

*This is a continuation of an article which was begun last week and should have read, "Educated Motherhood—Florence Shaw Kellogg." In two parts, Part I.

and brooding tenderness, that protecting care that awakens in the heart of the true woman with the first cry of her child, and grows ever stronger, deeper and more holy as life goes on. It is God's own education, gained only in His school, taught from the holy depths of His Fatherhood. "Like as a father pitith his children" so the great heart of the Father-God yearns over and teaches us each one.

THE MINISTRY OF CHILDREN.

A vital part of the mother's education comes from the children themselves. No one can give herself up in loving care and ministry to them without receiving from them far more than she gives. Holland wrote, "I feel how wonderful to me has been the ministry of my children, how much more I have learned from them than they have ever learned from me; how, by holding my own strong life in sweet subordination to their helplessness, they have taught me patience, self-sacrifice, self-control, truthfulness, faith, simplicity and purity. Ah! this taking to one's arms a little group of souls, fresh from the hand of God, and living with them in loving companionship through all their stainless years is, or ought to be, like living in heaven, for of such is the heavenly Kingdom."

Education gained from schools and text-books we may have—we should have if possible—for the more we are ourselves developed and trained, the better are we fitted to train our children; the more clearly we see the wonderful way of God in life and nature, and can better awaken thought and feeling in them. But education of this other kind we must have. We must understand that

"Artists of the Soul are we
Moulding life and destiny;
Workers at a task sublime
Which defies the touch of time,"

fitted for the high work entrusted to us. The mother, more than any other, moulds the character of her child. It is her work to frame and develop, to evolve all that is good and pure, while she represses and eliminates all that is not good. She builds not for to-day alone, but for all the days to come.

THE HOME THE WORKSHOP.

Our homes are our workshops in which we build most beautiful structures. It is there that we learn the value of a simple, true, honest life; there that our children learn to know themselves and to understand the relation of each to each; there that they find that nothing is small or insignificant, nothing that may not weave into the web of life and help it to be beautiful. There, as Francis Bacon said, they see how "God hangs the greatest weights upon the smallest wires," and learn that each wire must be strong and trustworthy, ready in its place to fulfill the work assigned to it. In the home Love takes them by the hand and leads them out of self and into service, while they learn over and over again with each new day, "that the glory of life is to love, not to be loved; to give, not to get; to serve, not to be served;" and all the fair flowers of life grow and blossom there.

I read a fine thing in a recent number of "American Motherhood" that I am tempted to copy here:

"HOME LIFE A SYMPHONY."

"A young Swedish musician, ill and poor, was received as a guest in an American home. From her easy chair she watched the household life around her and saw that 'Mother was the center of everything.' One day when she and the mother were alone together she said, 'I have been thinking of you much, very much, to see if I can tell what you are. I know now; this family is a great symphony and you are its theme. Every one sings to you. Without you would be no harmony at all, only discords, but you hold it all together. No matter what is sung, I hear that same sweet theme through it all, now high, now low, now soft, now loud, but ever there. You sing with us all, not only your own, but with me, the poor stranger. It is a beautiful theme. I love it.' Is this not a beautiful and poetic tribute to the true mother and home, telling as it does, how surely the sweetness of the theme, the atmosphere of the love-hued home is felt, 'even by the stranger within its gates,' and how much more surely and helpfully by the sensitive little children gathered there? Life in each home should be a 'symphony' with mother and the love she personifies the theme,

Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—**ALL WOOL.**

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a **LOWELL INGRAIN.**

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: **LOWELL INGRAINS** are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a **LOWELL INGRAIN** when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a **LOWELL INGRAIN.**

Manufactured by BIGELOW CARPET CO., New York

leading in a natural, healthful way to the divine life and love and the home, 'not built with hands, eternal in the heavens.' Oh, mothers, know you not that 'Motherhood is priced of God, at a price no man may dare to lessen or misunderstand?"

Know you not that there should be,

"Many windows in her soul
That all the glory of the universe
May beautify it? Not the narrow pane
Of one poor creed can catch the radiant
rays

That shine from countless sources. Tear
away

The blinds of superstition, let the light
Pour through fair windows, broad as
truth itself

And light as heaven. Turn your ear
To all the wordless music of the stars,
And to the voice of nature, and your
heart

Shall turn to truth and goodness as
Turns to the sun. A thousand unseen
hands

Reach down to help you to their peace-
crowned heights

And all the forces of the firmament
Shall fortify your strength. Be not
afraid

To thrust aside half truths and grasp
the whole."

as God shall give it to you day by day
as you walk with him down "the long
pathway of thought" and receive your
education fresh from his great heart.
Learn of books all that is given you to
learn for this is good; but most and
best of all learn of life, learn of na-
ture, learn of God, for this is indis-
pensable, this is eternal, and "fadeth
not away."

Tested Recipes.

French Cream Cake.—One cup sugar,
3 eggs, beaten with sugar thoroughly,
1½ cups flour, 2 tablespoonfuls baking-
powder (mix with flour dry); 3 table-
spoonfuls water. Bake in two tin pie-
pans. When done turn out on molding-
board, split with sharp knife and
spread with cream.

Cream.—One scant pint sweet milk
heated to near boiling. Add two small
tablespoonfuls corn-starch, wet with a
little cold milk; two eggs beaten with
1 cup sugar, juice and grated peel of
one lemon. Spread with frosting if de-
sired.—Mrs. K. J. McCracken.

Soft Ginger Cake.—Stir to a cream 1
cupful of butter and ½ cupful of brown
sugar. Add to this 2 cupfuls of cook-
ing molasses, 1 cupful of sour milk, 1
tablespoonful of ginger, 1 teaspoonful
of cinnamon, 3 eggs, teaspoonful of
soda, 4 teacupfuls of flour. Divide the
mixture in two pans and bake in slow
oven from 4 to 60 minutes.—Mrs. Clarke
of Sabean Club.

Lazy Doughnut.—One cup sugar, 1
cup sour milk, 2 eggs, 2 tablespoons
melted lard, ½ teaspoon soda; spice if
liked. Stir stiff as you can with a
spoon; roll, cut and fry.—Mrs. Mary
Buckman, Sabean Club.

Pumpkin Pie.—One cup stewed
pumpkin, 1 cup sweet milk, ½ cup su-
gar, 2 eggs, 1 heaping teaspoon corn-
starch, flavor with nutmeg.—Mrs. F. W.
Ross, Alden.

Custard Pie.—Three eggs well beat-
en, ½ cup sugar, 1 pint sweet milk, 1
teaspoon cornstarch, flavor to suit
taste.—Mrs. F. W. Ross, Alden.

Apple Honey.—Select firm apples,
peel and grind through a sausage mill;
to 1 quart of apples after they are
ground, add 1 quart of sugar and 1
quart of water, and cook till thick
enough.—Mrs. F. W. Ross, Alden.

Rose Tournament.

The writer having had the pleasure
of viewing the Rose Tournament, New
Year's Day, at Pasadena, California,
an account of it may be of interest to
the readers of the KANSAS FARMER.

This spectacle was one of the most
gorgeous in history, with its handsome
equipages, masses of bloom and beau-
tiful floats, while the leading hotels of
the Crown City decorated turnouts lav-

"A Kalamazoo Direct to You"

You save from 20%
to 40% by buying a
Kalamazoo Stove or
Range direct from the
factory at lowest
factory prices.
Moreover, you
get a stove or
range not excelled
by any in the
world. We guar-
antee quality under a
\$20,000 bank bond.

We Ship On

360 DAYS APPROVAL

and We Pay the Freight.

If you do not find the Kalamazoo exactly as represented, the trial does not cost you a cent. It will pay you to investigate.

Send Postal for Catalog No. 189.

All Kalamazos are shipped prompt-
ly, blacked, polished and
ready for use.

Kalamazoo Stove Co., Mifflin,
Kalamazoo, Mich.

All our coal stoves and ranges are fitted with
patent oven thermometer which makes
baking easy.



The American Boy

MAGAZINE

The Biggest, Brightest, Best
Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The Ameri-
can Boy" (1 year)..... 1.00
Kansas Farmer, 1 year..... 1.00

Total..... \$2.00
Both 1 year for..... \$1.50

Address,
KANSAS FARMER CO.,
Topeka, Kansas.

Collections made in all parts of the United States
No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

KANSAS

Special attention given to stock-breeders accounts.
Reference furnished on application.

E. G. KINLEY, Topeka, Kans.

Manufacturer of and Dealer in

CARRIAGES, BUSINESS WAGONS, &c.

Buggy Tops Wholesale and Retail.

Special Prices on Spring Wagons.

Order Work, Repairing, and Rubber

Tires.

Repository, 116 West Fifth Street. Factory, 124-126 Jackson Street. Ind. Phone 699.

ishly. A flying detachment of automobiles, touring cars and runabouts formed the first part of the parade seen by the watchers along the route, who had been waiting for more than an hour after the scheduled time. Their appearance was the signal for applause which continued almost without a break until the last straggling burro at the end of the procession had passed.

The queen of the tournament, with her twenty-four maids of honor, rode on a royal barge, a low automobile truck with rows of seats running across from wheel to wheel, rising in tiers toward the rear. This barge was shell-shaped and made more massive in its general effect by a dense covering of greenery. The ground work was of pepper boughs, covered with a lighter coat of smilax and embellished with marguerites. Heliotrope and violets were used in the trimming and for lining the interior of the shell.

The Garfield School offering was a float representing the Pasadena Tournament of Roses. On the platform, that was in itself a miniature garden, were all of the girls in the eighth grade of this school. These girls occupied practically all of this entire float, each representing an American Beauty rose. The lower part of their costumes was of green. Turned-up berths of deep red gave the appearance of petals, and the yellow centers were made with yellow ruffs around the neck and also turned up. Each girl wore her hair in braids wrapped around and around the head and powdered. Five boys in white suits with long colonial coats, and white shoes and stockings, also occupied positions on the float. There was a touch of comedy about this float, contributed by a small colored boy dressed in a white suit with red vest and other gorgeous trimmings, who clung to the rear of the float.

There were also represented the Grant, Lincoln, Columbia and Madison Schools, all of which were lavishly decorated. This spectacle was one of genuine interest to the writer, and to any Easterner like myself a sight of this kind is marvelous.

I was also particularly interested in the California method of preserving fruits and eggs. The Pacific Supply & Brokerage Co., Severance Building, Los Angeles, gave me their recipes gratuitously and stated that they sent them to any one for the asking.

The Californians are certainly the most generous and entertaining people that I have ever had the pleasure to meet.

THOMAS F. MORGAN.

The Young Folks

THE SECRET OF THE SONG.
She stole to my side in the twilight.
The beautiful goddess of song.
Her cheeks, like the tints of the morning
And lips like the glow of the dawn.

Oh, tell me your secret I pray you,
Fair, Goddess—I boldly entreat;
Your words are like exquisite music,
Your voice is so low and so sweet:

There's a charm in each unstudied accent
Like the natural grace of a flower
I have sought it in vain in the art rooms,
I have searched for it hour by hour.

She smiled as she lifted the harebell
I'd gathered to throw away
"Why, song is a gift from God," she said,
But its mission is sympathy.

The soul of the song is greater
Than the rhythm for which you seek;
And the highest aim of the singer
Is to comfort the faint and weak.

Would you learn the fair art of the poet?
You must pass through the gateways of pain;
Drink deep, at the fountain of sorrow,
And suffer again and again.

Then listen and wait for the voices,
As you stand 'mid the hurrying throng;
And perchance in the hush of the twilight
You may catch the true "secret of song."

MARIAN GILKINSON.

Aunt Kate to Donald on the Farm.
Chicago, February 18, 1906.
My Dear Boy:—So you think that I'm neglecting you lately?

I'm sorry, but, you see, both Katherine and Jack have been getting more than their share of letters.

I have somehow gotten it into my mind that being in the city, attending Washburn, going into society a little and all that, they have needed letters from their maiden aunt, more than my big boy in the country, who might seem to have fewer trials and perplexities.

Never mind, if you go to college next

fall, you will be deluged with letters of advice and warning, as Jack and Katherine are. That's the privilege of a maiden aunt.

I have thought of you many times in the last few weeks, Donald, if I have not written.

Sometimes in the rush and push of the Chicago streets, where one has to watch out or he will be run down by teams or cars, so hurried and crowded is the traffic; where human life seems to count for so little, and where the rights of other people are quite lost sight of, apparently, I have had a quick vision of the wide, wind-swept fields, and of you, contented and happy on your upland farm. Working? Yes, but working out under God's blue expanse of sky, in the wind and the sunshine, with space to grow mentally, physically and spiritually; with the birds and bees and God's animals about you, and at your feet the springing wild flowers, and the waving prairie-grass—time to grow broad-minded and strong and manly; time to think—time even to dream, perhaps. How can men think their highest, nobles thoughts in the whirl of a city like this, Don?

I want you to go to college and, in some measure, fit yourself for life. Then I want you to go back to the farm and live. Much of this is not living, it is only existing. You can see it in the harassed, careworn faces and the indifferent glance.

Life becomes a great whirling machine, and the weary, seething mass of humanity needs must follow the ceaseless grind. By all means, Donald, choose the farm. If you want to live, and get the sweetest and best out of life.

You want to know what I think of fraternities? You are going to have your mind made up, as to what you shall do when you do enter college, I see.

Now, Donald, what I honestly think, isn't at all popular. But I am given to telling the exact truth when I do express an opinion, and since you ask it, here it is:

I believe that neither fraternities nor sororities have any proper place in high schools. I believe that colleges would be much better off without them. They do not belong to my ideas of democracy and general good fellowship. They necessarily detract from one's interest in school work, which is primarily the reason that young people are in college. Their tendency is to make study almost if not quite secondary. They add to the expense very materially, and help to foster a spirit of rivalry. During the times when new members are being "rushed," lessons are bound to suffer. They are exceedingly selfish, for many fine young people are neglected, and their good and sterling qualities hardly discovered, if they choose to join no fraternity.

I believe it to be true, that young men will condone a grievous fault or excuse a hurtful habit in another young man, if he happens to belong to the same fraternity with themselves. But, more than all, I believe that it takes from the interest that young men feel—or might be led to feel—in church affairs.

I think if you can be happy at college without joining a fraternity, your school work will be better, more effective and less selfish.

You say that next week you want some advice of a different kind.

Why, I shall presently be getting vain—and conclude that I'm an oracle—a veritable "Lady from Philadelphia." With love,

AUNT KATE.

Musical Insects: The Giant Katydid. (Cyrtoophylus perspicillatus, Linnaeus).

ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

One blessing, perhaps, that we ought to be thankful for is that only certain small groups of night insects are musical; if all kinds of insects were as noisy as some examples of the orthoptera, such as crickets and katydids, there is no telling whether a person would be able to sleep in the summer time. A year ago last summer, I heard reports of a noisy creature that disturbed the slumbers of people in its vicinity, and then I read in the local paper that it had met its fate. The notice was as follows:

"KATYDID SANG ALL NIGHT."

"The neighbors in the 700 block, Tennessee Street, have been greatly annoyed for the past week by a katydid. It would sing all night long and sang so loud that some thought it must be a tree-toad. All attempts to shake it from the tree proved useless. It was caught last night and could be termed a giant katydid. It measured

Backache, "The Blues"

Both Symptoms of Organic Derangement in Women—Thousands of Sufferers Find Relief.



How often do we hear women say: "It seems as though my back would break," or "Don't speak to me, I am all out of sorts"? These significant remarks prove that the system requires attention.

Backache and "the blues" are direct symptoms of an inward trouble which will sooner or later declare itself. It may be caused by diseased kidneys or some derangement of the organs. Nature requires assistance and at once, and Lydia E. Pinkham's Vegetable Compound instantly asserts its curative powers in all those peculiar ailments of women. It has been the standby of intelligent American women for twenty years, and the best judges agree that it is the most universally successful remedy for woman's ills known to medicine.

Read the convincing testimonials of Mrs. Holmes and Mrs. Cotrey.

Mrs. J. C. Holmes, of Larimore, North Dakota, writes:

Dear Mrs. Pinkham:

"I have suffered everything with backache and female trouble—I let the trouble run on until my system was in such a condition that I was unable to be about, and then it was I commenced to use Lydia Pinkham's Vegetable Compound. If I had only known how much suffering I would have saved I should have taken it months sooner—for a few weeks' treatment made me well and strong. My backaches and headaches are all gone and I suffer no pain at my monthly periods, whereas before I took Lydia E. Pinkham's Vegetable Compound I suffered intense pain."

Mrs. Emma Cotrey, 109 East 12th Street, New York City, writes:

Dear Mrs. Pinkham:

"I feel it my duty to tell all suffering women of the relief I have found in Lydia E. Pink-

ham's Vegetable Compound. When I commenced taking the Compound I suffered everything with backaches, headaches, and female troubles. I am completely cured and enjoy the best of health, and I owe it all to you."

When women are troubled with irregular, suppressed or painful periods, weakness, displacements or ulceration, that bearing-down feeling, inflammation of the female organs, backache, bloating (or flatulence), general debility, indigestion and nervous prostration, or are beset with such symptoms as dizziness, faintness, lassitude, excitability, irritability, nervousness, sleeplessness, melancholy, "all gone" and "want-to-be-left-alone" feelings, blues and hopelessness, they should remember there is one tried and true remedy. Lydia E. Pinkham's Vegetable Compound at once removes such troubles.

No other medicine has such a record of cures of female troubles. No other medicine in the world has received this widespread and unqualified endorsement. Refuse to buy any substitute.

FREE ADVICE TO WOMEN.

Remember, every woman is cordially invited to write to Mrs. Pinkham if there is anything about her symptoms she does not understand. Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham, her assistant before her decease, and for twenty-five years since her advice has been freely and cheerfully given to every ailing woman who asks for it. Her advice and medicine have restored to health innumerable women. Address, Lynn, Mass.

Ask Mrs. Pinkham's Advice—A Woman Best Understands a Woman's Ills.

about an inch and a quarter long and had a very large body; its wings were immense. It will be a good specimen for one who is collecting insects."

(From Lawrence Journal, August 4, 1904.)

On inquiring if the specimen could be obtained, I learned that chickens



A Pair of Giant Katydids. Male (upper figure) and Female. From Nature. Reduced to one-half natural size, from plate in "Tenants of an Old Farm."

had eaten it. However, my disappointment was banished a few nights later when I heard a strong, rasping noise which issued from a tree near a neighbor's house, on a lot next to where I lived; and as it continued all night, I



Hard-Hitting, Sure-Fire Uniform

Partridges are hard to hit and harder to stop. U. M. C. Arrow or Nitro Club Shells loaded with any smokeless powder will bring the toughest old cock partridge to earth if you aim right. Your dealer sells U. M. C. shells. Catalogue free.

U. M. C. cartridges are guaranteed, also standard arms when U. M. C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONNECTICUT
Agency: 313 Broadway, - - New York



We are distributing free to all who write and inclose a stamp, a prescription for the cure of the liquor habit. It can be given secretly in coffee or food. Also a recipe for the cure of the tobacco habit, that can be given secretly. The only request we make is that you do not sell this recipe, but give free copies to your friends.

KANSAS ANTI-LIQUOR SOCIETY, Room 77 Gray Building, KANSAS CITY, MO.

AGENTS WANTED. Call for bottle prescription for the best sellers; 100 per cent. profit.

Write today for terms. P. O. Box 100, Kansas City, Mo.

judged that an accommodating specimen of what I wanted had located especially for my benefit. A night or two after, when another songster began calling, I concluded it was time to make an attempt, at least, to capture one or both of the supposed insects. So, provided with a lighted lantern and a poison bottle, one night I climbed the tree, a moderate sized elm, in which the first fiddler was harbored, and located the fellow by his racket. He was a little cautious when I approached him with my light and stopped fiddling, but remained within reach, although attempting to conceal himself among leaves on the under side of a branch. With one well-aimed grab, I secured him in my hand and soon he reposed safely in my poison bottle. However, his comrade in another tree, a smaller elm, repeatedly evaded me by climbing out to the tips of branches beyond reach and out of sight. The captured specimen was identified as *Cyrtophyllus perspicillatus*, Linnaeus, and is now the only example of its species in the University collection.

To show some inquiring neighbors how the insect's call was produced by a rubbing action of the fore wings, I caused the note to be sounded artificially, after the insect was dead, by moving those wings back and forth in the grasp of my fingers, quite to the astonishment of my audience. As might be expected, however, the sound thus reproduced was not so loud as the live insect made.

For an explanation of the musical apparatus of insects, or in answer to the question, "Do all insects make their music in the same way?" I beg to refer the reader to the chapter treating of music-making insects, in the book entitled, "Tenants of an Old Farm." In part it says:

"In the katydid, for example, the musical instruments are a pair of taborets." (Then follows a description of the insect, together with illustration, the latter, herewith exhibited, represents both male and female to better advantage than words can portray.)

"The taborets are formed by a thin and transparent membrane, stretched in a strong, half-oval frame in the triangular overlapping portion of each wing-cover. When the male wishes to sound his call, he opens and shuts the wing-covers so that the frames of the taborets rub rapidly and violently against each other. The mechanism of the taborets and the concavity of the wing-covers reverberate and increase the sound to such a degree that it may be heard in the stillness of the night at the distance of a quarter of a mile.

"The music of the katydid is certainly remarkable considering how it is produced. It consists of two or three distinct notes, almost exactly resembling articulated sounds. These correspond to the rapidity with which the wing-covers are shifted across each other, and the note produced is very well expressed in the popular name of the insect.

"The story of katydid's development is but a repetition of the cricket's. It is found in the perfect state during the months of September and October, at which time the female lays her eggs. These are about an eighth of an inch in length, and resemble tiny, oval, bivalve shells in shape. The insect lays them in two contiguous rows along the surface of a twig, the bark of which has been previously shaved off or made rough with her piercer. Each row consists of eight or nine eggs, placed somewhat obliquely and overlapping each other a little, and they are fastened to the twig with a gummy substance. In hatching, the egg splits open at one end and the insect creeps through the cleft. Its history after that, as I have said, quite resembles that of other orthoptera."

Numerous examples showing these eggs in natural positions have some under my own observation. They have been found in fall, winter and spring, with the eggs exposed just as they were laid, both to enemies and weather. The instances are recorded as follows: In September, on weed-stalk; in February, on twig; in March, on apple twig; in May, on grapevine—all in Douglas County; and in April, on twig of peach in bloom, Sedgwick County, Kansas.

Another case somewhat perplexed me as to whether I had found cricket or katydid eggs. Two crickets, specimens of the common black kind, flew in at the window of my bedroom during one July night, probably being attracted by lamplight, and then escaped from my efforts to capture them by springing into the recesses among my books stacked on shelves against the wall. From this place, strong chirping sounds were emitted which frequently awakened me from sleep during two or three nights afterward, until finally search was made to catch them, but in vain.

The disturbance evidently caused them to move elsewhere, for they were neither seen nor heard any more. However, a few days later, while shifting some of the books, a double row of eggs was noticed on a paper-covered catalogue, one row extending along the back and the other adjoining along the edge of the cover. My first supposition was that one of the erickets, the mate of the fellow that chirped so freely, had laid these eggs; but, on the other hand, their appearance and arrangement was exactly like those of a katydid. Hence, I have since wondered how a katydid could enter and leave my room without being detected, or why it should lay eggs where the young ones when hatched would perish for want of food. An explanation should be included here to the effect that in all these cases, very likely, the eggs belonged to common species of the katydid and not to the giant katydid, which, as mentioned, is a rare insect in Kansas. Katydids usually frequent wild thickets and do little damage to vegetation, compared with crickets.

Since so much information has been drawn from the book, "Tenants of an Old Farm," due appreciation of this commendable work should be accorded here. The presentation of scientific truths in the form of a popular narrative, such as would hold the attention of the ordinary reader, is a plan well carried out by the author of this book, Doctor H. C. McCook, and its success is now attested by a new and revised edition. What grand opportunities for revealing Nature's secrets are found on every farm, but how few are the persons who regard the wonders about them! Even the smallest creatures, as the common insects and spiders, live romantic lives, making marvelous provisions for their protection and sustenance, which people are too prone to overlook.

The book purports to have been written by a professional man forced by ill health to give up a lucrative practice and live for a time on a farm. But here, he finds he is not the only tenant, and his love of natural history induces him to study the insects and spiders, thereby affording a healthful as well as instructive diversion. His observations are presented in the form of entertaining stories which are told in a conversational way, as if to friends and members of his household, who often enter into a general discussion during their evening gatherings about the fireplace, and many amusing incidents are related. Besides, the book is replete with illustrations from nature, interspersed with comical adaptations, from the drawings of master artists. It is not only a revelation to country folks, but brings the charm of rural study direct to the city home.

The Little Ones

WHY?

"Brother," said Ruth to Teddy, one day, as the children were out in the yard at play. "I don't see how the little plants know they should send their leaves up and their roots below." "How do you know," he scornfully said, "You should stand on your feet, and not on your head?"

Johnnie's Fun.

GERTRUDE L. ARNEL.

"Johnnie, I want you to take care of baby Harold while I go over to Mrs. Brown's," mamma said. "He is asleep in his cradle and may not awake until I return."

"All right," Johnnie promised. It was great fun for awhile. He played that he was a soldier on guard and marched up and down before the sitting-room door; but that soon grew monotonous—because, as he said, he "couldn't shoot nothing without wacking the baby." He went out in the kitchen and played that he was a great hunter, and had thrilling adventures with wildcats, until Puss and Tabby, tired of the fun, took themselves off to the barn.

He wandered listlessly into the sitting-room. The baby was still sleeping. Over in one corner stood the tin soldiers. Johnnie thought at first he would get them out and play war. "But, pshaw!" he thought, "I'd have to push them every step they took, and when I get ready to charge, as real soldiers do, they always fall over."

Suddenly he exclaimed: "I know what I can do. I'll have a sale. Guess they can listen most as good as anybody, if they can't walk."

The tin soldiers were arranged in the center of the room. A chair before them served for a platform. Papa's big hammer was brought from the tool-

house, and everything was now ready for the sale—except the things to be sold. Puss and Tabby were brought in, but they positively refused to be put up at auction. "Nobody would want to buy eats anyway," Johnnie reflected, nothing daunted. If he only had some pigs or a calf—but that seemed impossible, unless—he might go out to the barn if he could leave the baby. Then the idea came to him, why not sell the baby? Wouldn't it be fun to black it and pretend it was a negro? Of course, no one would want to buy a little white baby.

Now Johnnie was not naturally a bad boy. That is, he meant to do right. But sometimes in the excitement of his play, I fear his ideas of right and wrong became badly twisted, for he did things "just for fun," that at other times he would have thought mean. If he had any misgivings about making a negro of his little brother, he excused them with the thought that he "would wash it all off 'fore mamma came home. Besides, 'twouldn't hurt the baby and 'twould be such jolly fun."

"The baby looked comical when it was blackened, and Johnnie felt quite elated over his success. He climbed on a chair and began to auctioneer.

"Gentlemen and Ladies," he said, "I has a little orphan nigger to sell. His Massa and Missus is gone and I'se his guardian. I'se going North and can't take him with me. He's as black as—as soot can make him. Black enough for two niggers. Aged one year the day Jimmy Brown and me made that big snow-man; and we had cake with his name on it for dinner—the baby's I mean. He won't run away, gentlemen 'cause he can't walk yet. He—"

Crash! The hammer slipped from Johnnie's fingers and fell on the tin soldiers. The baby awoke and began to cry. Johnnie tiptoed over and rocked the cradle, but baby was wide awake now. He took it up, and it immediately began to slap his face with its little black hands. Johnnie found, to his sorrow, that it was "black enough for two niggers." Just then the door opened and mamma came in.

Johnnie fervently hoped that she would whip him right then, and not wait to ask questions. But mamma thought different. She heard his explanations while she washed the baby. Then she smiled and said: "Johnnie you look so comical; you may leave the black on your face. Some one might come in, and wouldn't they laugh to see my little negro boy?"

Poor Johnnie! He answered "Yes'm," and meekly walked out of the room. Some way acting a negro had lost its fun. He hurried out to the barn for fear some one might come and see him. He was having a nice time turning somersaults on the straw, when he looked up and saw Jimmy Brown in the door.

"Who-oo-ee!" Jimmy exclaimed, with a broad grin. "Turned nigger, ain't you? Say, you're pretty. Oh, watch out, don't get too close to the horses, you might scare them," he said, as Johnnie jumped onto the floor before him.

"Jim Brown, you scat for home an' don't you never come here any more!" Johnnie cried, angrily.

Jimmy "scatted" off a little ways, then turned and called out: "Say, next time you turn nigger don't forget to black your nose. You'd make a first rate picaninny if the white didn't shine through."

Johnnie did not answer him but started toward the house. He met Uncle Fred at the door.

"Hello, Johnnie boy," he called out, and then started back, surprised. "Why, what's the matter with your face? Have you begun to mortify?" he asked, laughing.

"Ye—Yes, sir, I feel mortified," Johnnie stammered, not knowing what else to say, and thinking perhaps Uncle Fred would sympathize with him. But Uncle Fred only laughed the more. That was too much for Johnnie when he expected sympathy. He began to cry.

"Why, Johnnie, I thought it was such fun to play negro," mamma said.

"Well, 'tain't," sobbed Johnnie, "an' 'twas mean to take 'vantage of baby that way. 'Tain't fun at all unless you can laugh with the other fellows."

"That's right, my boy," mamma said, "and I suspect it is not really fun for the 'other fellows.' I think it is just selfish amusement."

Burly Party—Are you aware, sir, that you deliberately placed your umbrella in my ear last evening?

Little Bifferton—Very careless of me, I'm sure. I wondered what became of it; and would it be too much trouble to ask you to return it?—Exchange.

The Delicious Fragrance

from a hot Royal Baking Powder biscuit whets the appetite

ROYAL Baking Powder improves the flavor and adds to the healthfulness of all risen flour-foods. It renders the biscuit, bread and cake more digestible and nutritious.

Royal Baking Powder makes hot breads wholesome. Food raised with Royal will not distress persons of delicate or enfeebled digestion, though eaten warm and fresh.

LOW ONE-WAY RATES

VIA

UNION PACIFIC

FROM

TOPEKA

EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**



Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1885).
Give and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chaitois Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marion County (1902).
Women's Country Club, Anthony, Harper County.
Taka Embroidery Club, Madison, Greenwood County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1903).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

A WOMAN'S CLUB.

What is a woman's club? A meeting ground For those of purpose great and broad and strong Whose aim is toward the stars; who ever long To make the patient, listening world resound With sweeter music, purer, nobler tones. A place where kindly, helpful words are said And kindlier deeds are done; where hearts are fed; Where wealth of brain for poverty atones, And hand grasps hand, and soul finds touch with soul. Where victors in the race for fame and power Look backward even in their triumph hour To beckon others toward the shining goal.

What is women's club? The fabric of a dream Touched with an altar coal and made alive, Instinct with hope for those who toil and strive And wait to catch that joyous day's first gleam That ushers in a better, freer age. When right for one shall be for all the right; When all who meet in life's recoil and fight The war for right and truth shall bravely wage.

—HELEN M. WINSLOW, in Club Member.

ART PROGRAM.

Jules Breton.

Roll call—Pictures.
I. Childhood of Jules Breton.
II. Years of preparation.
III. "Gleaners."
I. A paper telling of the childhood of Jules Breton (pronounced Bre-tong with accent on the last syllable) may be made picturesque and entertaining. It may be written so as to portray the customs and manners of the French people at that time, perhaps bringing in a little of their history.

II. This subject may cover the years beginning with his life at the seminary, and embrace the few years he spent in college, the longer and more congenial period at the Royal Academy at Ghent, and his travels, carrying it to the death of his father and the Revolution of 1848.

III. The "Gleaners" is one of his best paintings. It will be interesting to compare it with Millet's (Me-ya with accent of last syllable) "The Gleaners" and note the difference. They are both pictures of peasant life and represent work, but the point of view of the two artists is so different. Breton's is bright and happy, portraying work as joyous. Millet's is sad and cheerless. Millet spent his life in dull, cheerless rooms while Breton's life was one of joy in a happy home.

Sabean Club.

The Sabean Club has lost a number of its active members by removal, yet those remaining seem no whit discouraged.

We have finished the course taken up last year, the Bay View course, through the history of Russia and Japan, deciding for the short time re-

maining for work, to adopt a miscellaneous program, leaving it in the hands of the president to formulate from suggestions by the members. A desire for a more comprehensive knowledge of politics was expressed, and that illusive and delusive subject was made the program for a particular meeting. Though nearly every shade of political creeds has its representatives in the club, it did not prove to be a remarkably warm number after all. The subject was fairly discussed. One thing upon which the club was unanimously agreed was that given the ballot, the women of Kansas are quite ready to prove that the purification of politics is not an iridescent dream. This does not refer to the municipal ballot.

The program for February 27, is quite varied and yet has a similar trend:

I. The situation in Parliament (British).—Mrs. John Clarke.

II. The separation of Sweden and Norway.—Miss Bertha Moore.

III. Affairs at Washington. (Not the affair).—Mrs. Alice Walton.

IV. Should women study the laws of Kansas?—Miss Nettie Bliss.

V. The influence of woman in municipal affairs.—Mrs. Harding Buckman.

The club meets on alternate Tuesdays. At the beginning of the year it was decided to take up some charitable work in addition to the literary program. In this we have not been very successful. Living so far apart it is difficult to work unitedly, though each has accomplished something individually. I question if we might not accomplish better results by federating with the city clubs, and this idea has been made prominent by the president. However, at the annual business meeting it was decided in the negative.

The officers for 1905-1906 are: Mrs. McCracken, president, Mrs. J. D. Corbet, vice president, Miss Bertha Moore, secretary. The club colors are royal purple and gold.

That this club has maintained its organization for a period of six or seven years is proof positive of the progressive spirit of its members.

KITTIE J. McCRAKEN.

The Club department is delighted to welcome another club to its roll. The Chaldean Club is a rural club near Sterling and was organized nearly two years ago by four ladies from the Sorosis Club, Sterling. The membership numbers fifteen and they meet every two weeks. The club flower is the sunflower, and the club colors are yellow and brown. They also have a club chorus which is as follows:

"Oh, the farmers' wives are extra superfine, In the fashions they are strictly up to time; They have beauty, brains and worth, They are the dearest wives on earth, Hurrah, for the Chaldean Club."

Mrs. Zeno Dymond, the secretary, says, "Our programs are miscellaneous, but so far we have never had any but literary programs. We meet every two weeks when we lay aside our household duties and enjoy the afternoon, and rest from our work, a recreation we farmers' wives so much need." Here is a program of one of the meetings:

Roll Call.....Current Events
The True Queen of the Home....
The New Cook.....Mrs. Feighner
Reading, "When Company Comes..."
.....Mrs. Hutchens.

Improved machinery which combines the performance of several operations, facilitates cultivation and lessens farm labor is something no agriculturist can afford to be without. In these days of large crops and small profits the great question with the market gardener should be the least expensive means he can employ for preparing the ground for planting his crop and cultivating it. Proper planting is a very essential object in saving labor in after cultivation.

The seed drill that has the reputation of many seasons' use, one that in operation opens the furrow, drops the seed accurately at the desired depth, covers it and lightly rolls the earth down over it and marks the next row with such precision as to admit of cultivation with implements that are furnished as attachments is a safe article for the farmer to invest in.

Such an implement is made by the Ames Plow Company of Boston and New York. They also offer the seed drill and Wheel Hoes as separate implements. The Mathews principle which is embodied in the construction of these implements has been copied by nearly all makers of seed drills. This is in itself the strongest kind of a recommendation for the genuine goods. As offered by the Ames people this year they have all the up-to-date improvements. You should send to these manufacturers for further particulars. The Ames Plow Company have probably had more experience in the manufacture of hand seeders and cultivators than any other concern in this country. They first illustrated them in a catalogue published as early as 1847. It is indeed remarkable that one concern should be able to keep at the head of the market for so many years, but the name, Ames Plow Company, and the sterling worth of their goods, are known throughout the world.

The Sabean Club has lost a number of its active members by removal, yet those remaining seem no whit discouraged.

We have finished the course taken up last year, the Bay View course, through the history of Russia and Japan, deciding for the short time re-



Simpson - Eddystone Solid Blacks

Beautiful rich-looking fabrics with great intensity of color. Do not fade or wash out. The standard materials for mourning dresses.



Ask your dealer for Simpson-Eddystone Solid Blacks. Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia

CASH! PIANOS! GUNS! FREE!

Most novel contest ever inaugurated! All these prizes will be given away. Our contest is new and it is a puzzler! Here is one to test your ingenuity! You have seen the old word building contests! Our offer is not to see how many, but how few words you can make! It doesn't mean all night going through a dictionary to find how many, but it means sitting right down and using your head. Our prizes will go to the bright ones. You are as likely to win as anybody. Surely you can arrange these letters in as few words as anybody. Any English word may be used. No foreign words or proper names. Every letter left over counts as a word.

OUR OFFER We will give \$5.00 to the person who arranges these letters into the fewest English words. \$25.00 cash to the next nearest. \$10.00 cash to the next, \$5.00 to the next, and \$1.00 to each of the next five. Send in your lists. There are no conditions in the contest for these prizes. Send in your lists at once. Just as soon as it is received we will send you our complete offer.

Here are the letters! Q-A-E-M-C-I-N-T-A-S-A-N-C-D-I-U-E-R-T-S-N-E-E-N-T-C-N-T-S-T-U-T-O-I-N-L-A-U-O-A-I-V

Use only the letters above and only as many times as they appear above.

An example! For instance the following words can be made: Us-an-sun-to-in-at-it-no-neat-vat-quit-me-scene-laid and three letters, c, r and e, left, counting same as 17 words. Now take the C left over and put it with "an" and you have "Can" and thereby reduce your words to 16. Another C added to "at" makes "Cat" and reduces your number to 15. See how few you can get. The words we have given are just a suggestion. Just to explain the idea. Of course the idea is to use as long words as possible so as to use up your letters. The word "consider," for instance, uses up eight letters. Go to work at once. We have given you a big jumble of letters. Don't expect to get them in too few words. The person winning first is likely to have over a dozen words in the list. If you can get that few, send in your list sure.

SUCCESSFUL FARMING, 324 Tenth St., Des Moines, Iowa.

A POWER on Every Farm

THERE should be a power of some kind on every farm.

It saves labor, time and money, and increases the earning capacity of the farm.

It will work the raw material of the farm into a finished product.

All up-to-date farmers agree that the modern gasoline engine is the best farm power.

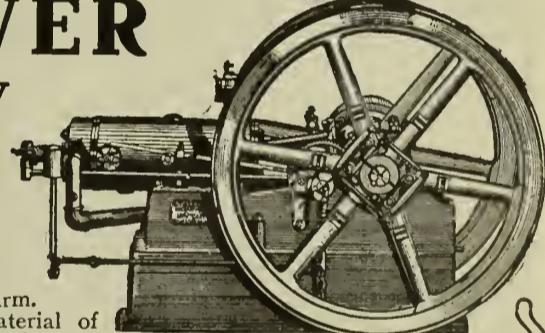
Our I. H. C. gasoline engine is the **best gasoline engine**.

It is strong, durable, long lived and is of full rated, actual (not estimated) horse power.

It is easy to operate and is easily kept in working order.

It develops the maximum of power with the minimum of fuel.

Specially adapted to cutting dry fodder and ensilage, husking, shredding and shelling corn; threshing



and grinding feed; sawing wood, separating cream, pumping water, etc.

Indeed there is no service required of a power that will not be performed most satisfactorily by this engine.

I. H. C. gasoline engines are made in the following styles and sizes:

Vertical—2, 3 & 5 Horse Power;

Horizontal—(Portable and Stationary), 4, 6, 8, 10, 12 & 15 Horse Power.

If you are not intending to purchase an engine now, you may want one in the future and really ought to know more about them.

Call on our Local Agent, let him show you the engines and supply you with catalog, or write for further information. Do it now.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, ILL.

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40

Made of the best Soil Center Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for 11th Share \$1.75 big free catalogue of Riding Plows, Disc Harrows, Listers, Cultivators, everything in the Implement Line; Buggies, Wagons, Harness, Steel Ranges, Sewing Machines, and a thousand other things sold to you direct at wholesale prices. Write now and get ready for spring work.

16-inch Only \$8.95 Extra Share \$2

12 in Hard Steel Caster-Couter With Plow \$1.25 18 in. \$1.00 The only Plow factor in the United States selling direct to the farmer.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full Line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass SEEDS. Write to

KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

REAL ESTATE.

TO TRADE for stock, good 160-acre farm in Cherokee County. H. H. High, Faulkner, Kans.

READ, CONSIDER, COME, OR WRITE—80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres, improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acre tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realy Co., Clay Center, Kans.

A BARGAIN—160 acre farm, 80 in cultivation, balance pasture; 5 room house with cellar, new barn \$3650. Also cattle-shed, corncrib, granary, hen house, and implement-shed, well, windmill, orchard; 1½ miles to school 3½ miles to Alta Vista in Wabaunsee County. Price \$5,600. A. H. Meseke, Alta Vista, Kans.

KANSAS FARM LANDS for sale in Republic and Washington Counties, 180 miles from Omaha, St. Joe and Kansas City, located in the corn and alfalfa belt, where the farmer has got rich by feeding hogs and cattle and selling out to live a retired life; for prices and description of improved farms, write to J. E. Caswell, Belleville, Kans.

MORRIS COUNTY LAND—640 acre of fine land adjoining railroad town, 500 acre of which is first class farm land; no buildings; price \$10,600. 320 acres good land, half in cultivation, 5 room house, new barn, only 3½ miles out; snap, \$7,500. Splendid ranch 480 acres—300 in cultivation—10 room house, barn, spring in corral, steel mill; alfalfa. Price \$13,000. Easy terms, \$8,000 acres. Finest ranch in the county. Will sell by quarter, half or section. Apply to John Taggart & Son, White City, Kans. Mention Kansas Farmer when writing.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Qulsenberry, Marion, Kans.

FOR SALE—220 acre well improved farm, 6 miles from Emporia. Price, \$25 per acre. Write Hurley & Jennings, Emporia, Kans.

A 320-ACRE FARM within two miles of good town. Good new house, barn and stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

BUY FROM OWNER—This fine alfalfa and sugar-beet farm, near school and town, only 6 to 12 feet to inexhaustible supply of sheet water; a bargain for quick sale. James A. Jackson, Syracuse, Kans.

440-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale, California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY FARMS in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock or fruit farms. I have farms in Oklahoma, Missouri and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE
In western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

CASH for your real estate or business, no matter where located. If you want your property sold quickly send us description and price. N. B. Johnson & Co., 547 Bank Commerce Bidg., Kansas City, Mo.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 156 Wabash Avenue, Chicago.

FINE STOCK FARM FOR SALE—640 acres, one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well-watered, about 40 acres in alfalfa, all fenced and cross fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price, \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 114 W. 6th St., Topeka, Kans.

FOR SALE—160 acre tract 6 miles N. E. of Council Grove, Morris County, 100 under cultivation, balance mow land, \$3,500. Easy terms. Eastman & Lakin, 115 West 6th Ave., Topeka.

FOR SALE—80 acre improved farm 3½ miles N. E. of Harveyville, Wabaunsee Co., 45 in cultivation, balance pasture; 7 room house, barn, crib and out-buildings; \$2,500. Cash \$800. Eastman & Lakin, 115 West 6th Ave., Topeka.

FOR SALE.
640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class, well-equipped dairy farm. M. V. RICHARDS, Land & Industrial Agent, Washington, D. C.

Miscellany

Seven Principles in Making and Maintaining Earth Roads.

E. C. COWLES, BEFORE THE TRI-COUNTY FARMERS' INSTITUTE, WELLSVILLE, KANSAS.

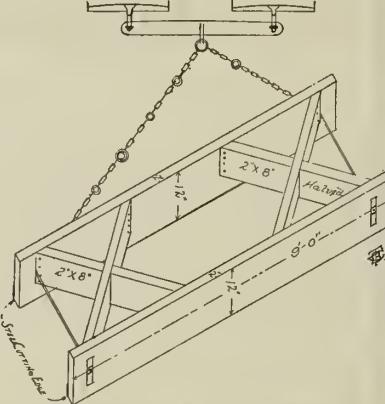
It is a general complaint that our roads are not made much better from year to year under our present system of working them.

It seems to me that there are no general principles applied in the working of the roads. There are at least seven principles which can and ought to be applied in road construction.

(1) Economy; (2) width; (3) completeness; (4) yearly care; (5) convexity; (6) hardness; (7) smoothness. Now while the sixth and seventh are by far the most important, they all center in the first.

1. Anything that touches our pockets we are apt to consider of the first importance. There is a true and there is a false economy in working the roads. The false is to work for present results without much regard for the future; the true is for future good.

2. The second principle is width. If we call the working and care of a 20-foot road with 10-inch rise one, the work and care of a 25-foot road with 12-inch rise will be one and eight-tenths; and a 30-foot road with 15-inch



rise will be three and three-tenths. Do we need the wide road? More than nine-tenths of the travel is on less than 8 feet of a good road. Twenty feet wide with 10-inch rise is sufficient for two loads of hay to drive abreast. What more width do we need?

3. Now for the application of the third principle, completeness. Even with the best use of the large grades, there will be some uneven places which eventually will become mud-holes without some extra work, and especially will it be the case with both sides of culverts, as the grader must be raised to pass the culvert. Also the ditch will not be open to let the ditch water away from the road. Under this head is a need of an extra man and team along with the grader to smooth the dirt the grader has thrown up, also with harrow and roller and slip scraper to complete the work.

4. The yearly care is quite as important as either of the others. How often we see the commencement of a mud-hole which could be stopped with two or three scrapers full of dirt, or the ditch-water starting to wear into the side of road. A few minutes' work would save the road, which work, if done in time, will save one-half of the work expended at that place. These little things, if not seen to and fixed in time, are the cause of the lack of improvement of our roads from year to year. When should this care be given? When the smoother is being used from time to time.

5. Convexity should be one-half inch to each foot of width of road worked, that water may leave the road-bed and not soak in.

6. Hardness will be accomplished by the use of a three-ton roller, puddling of road by travel and the use of some kind of a smoother.

7. The principle of smoothness, while not as costly as grading, should be the most frequently applied and is really of more consequence than grading or any other operation, for the purpose of keeping a good road. How frequent, depends upon the amount of travel and kind of soil; near town twenty to twenty-five times in the year or as often as the road becomes a little rough; farther in the country eight to twenty times, or at all times after a rain if there is any show of ruts or roughness.

Now for the cost for 1906. I will suppose that we have an eastern average township of 140 miles of road. As our roads are tolerably well graded, we will

REAL ESTATE.

FOR SALE.—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

WANT WESTERN LAND or cash in exchange for the Best Welding Compound on the market. Something every blacksmith in the United States uses. One hundred pounds free goes with the formula for making the compound. Just the thing for the man who wants to retire from the farm. Address box 27, Waurika, Oklahoma.

FOR SALE.—If you are looking for a farm at a bargain, I have got it. Eastern owner wired me to sell. 100 acre improved farm in Woodson county, Kansas, south of Toronto. 100 acres in cultivation, all fenced with hedge and wire. If sold by the 15th of March \$11.00 per acre. W. W. Manspeaker, No. 819 Kansas Avenue, Topeka, Kansas.

FOR SALE.—Forty-two acres of land adjoining the city of Erle, Kansas, county seat of Neosho. This land was formerly the old fair grounds, and has about \$3,500 worth of buildings on it; some timber, good soil, and plenty of water. Will make the finest place in Kansas for a hog farm. Will sell or rent or go in partnership with a good man with some money who understands raising pure-bred hogs. C. E. Shaffer, care of Kansas Farmer.

FOR SALE

Farm 2,160 acres, 570 acres in wheat. 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

If you have farms, ranches, or city properties for sale or trade anywhere in the State, we would like to have you list the same with us by sending a thorough description together with lowest prices and best terms. We have a fine list of city properties in Topeka and farms around the city, some for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS,
116 E. Fifth St., Topeka, Kans.

He is the man who can sell you land anywhere in Kansas. One hundred and sixty acres 2½ miles from Jamestown. Fine improvements, also best of wheat land. This farm can be had for 30 days at \$4,000, also 160 acres of farm adjoining, same price, all under cultivation.

CASH FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 415 Kansas Avenue, Topeka, Kans.

Rooks County Land
Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps, address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

8,000 ACRES

Wheat and Alfalfa Land in Logan and Wallace.

These lands are prime No. 1 land, selected, smooth, well grassed and well watered. Price \$4 to \$6 per acre, part cash, and long time for balance.

Chas. A. Wilbur, 111 W. 6th St., Topeka, Kans.

S. M. WOOD & CO.

REAL ESTATE, RENTALS, LOANS.
Buy, Sell, or Exchange Wild Lands, Ranches, Farms, City, Property, Stock or Merchandise. Call or Write Us.

TOPEKA, KAN. 534 KANSAS AVE.

Looking for Land?

Come to Downs, Kans., a thriving city of Kansas, 200 miles west of Atchison, on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa and other cereals, successfully.

THE DOWNS REALTY CO.,
Downs, Kansas.

Hurley & Jennings'
Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate
and Loan Co.

Holton, Kansas,

Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

REAL ESTATE.

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. Niquette Bros., Salina, Kansas.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice, Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
819 Waukright, St. Louis.

H. C. BOWMAN,

SHAWNEE COUNTY FARMS.

TOPEKA RESIDENCE AND MERCANTILE PROPERTY.

VACANT LOTS.

TEXAS RANCH LANDS.

42 Columbian Bldg., Topeka, Kans.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

GREATEST OF ALL
IRRIGATION PROJECTS

on the American Continent, now being constructed by

CANADIAN PACIFIC RY.
IN
Southern Alberta,
Canada

The land that's famous for its tremendous crops of Hard Winter Wheat, Alfalfa and Sugar Beets.

100,000 Acres
ARE READY TO SELL

A million and a half acres will eventually come "under ditch".

Price \$18 to \$25 an Acre

On Exceptionally Easy Terms

This land is located just north of the main line of the

Canadian Pacific Ry.,

in the heart of the so called Gleichen tract, where 45 bushels of wheat and 80 to 100 bushels of oats have been raised to the acre without irrigation. What will the land do with irrigation? There is some attached areas of non-irrigable land which are perfect for grazing lands.

This makes an ideal combination of irrigated and non-irrigated land.

There are but few of these

Combination Farms

It will be wise for you to select at once.

For further particulars and certificate of low railroad rates, write

Canadian Pacific Irrigation Colonization Co., Ltd.

Calgary, Alberta, Canada.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Wheat Farms on Easy Terms

We offer to BONA-FIDE SETTLERS their choice of one-hundred
160 acre farms in
Sherman County, Kansas

At from \$5 to \$15 per acre. ONE TENTH CASH, the balance payable in nine equal annual payments. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King,

= = =

McPherson, Kansas

need to grade only 70 miles, but care for and smooth 140 miles.

Grading for 70 miles at \$12 per mile, \$840; yearly care of 140 miles at \$1 per mile, \$140; smoothing, 140 miles at \$3 per mile, \$420; finishing 70 miles after grading, at \$3, \$210; total cost for year 1906, \$1,610; cost per mile per year \$11.50.

Cost for 1907, by need of less grading, need not cost over \$8 per mile. How shall this work be done? By contract per mile. Why? Because the average roadmaster will get only about two-thirds as much work done by the day at the same cost as will be done by contract per mile.

Why not smooth by voluntary work? Because after a little time the smoothing will not be done on time. Also, because only a few will volunteer to do the work, and therefore there will be no equality in the work of those who use the roads.

While we have much law concerning our roads, I think of only two changes needed. First, compel the town board to let all work by contract. Second, reduce allowance for poll tax to \$2 per day and make voting conditional upon payment of this tax.

Prizes for Good Roads.

The members of the Commercial Club of Manhattan, Kans., are very desirous of creating a deeper interest in good roads and various schemes have been proposed. At the regular meeting held Tuesday evening the matter was thoroughly discussed and it was voted that the Commercial Club of Manhattan offer the following prizes:

1. Fifty dollars (\$50) in gold for the best mile of road made with a "King road drag" within seven miles of Manhattan.

2. Twenty-five dollars (\$25) in gold for the second best mile of road made with a "King road drag" within seven miles of Manhattan.

3. Ten dollars (\$10) in gold for the best one-half mile of road made with a "King road drag" on each rural route leading from Manhattan.

4. Five dollars (\$5) in gold for the second best one-half mile of road made with a "King road drag" on each rural route leading from Manhattan.

5. No prize of road to take more than one prize.

6. No prize-taking piece of road to be eligible for the same or a lower prize the second year.

7. Competitors to furnish their own drags.

8. The Commercial Club to select the judges of the contest; said judges to be three absolutely disinterested parties.

9. The judging of the roads to be done at some time between April 15 and May 15, 1907.

Peculiar Well Water.

Replying to Frank W. Shill, Liberty, Kans., Prof. J. T. Willard, Director of the Kansas Experiment Station, says:

"I can not tell from your description what the substance is in your well-water that causes it to turn white when allowed to stand. You do not mention any odor so I suppose it is not what is called a 'sulfur water.' If you will procure a clean, half-gallon, glass-stoppered bottle, such as druggists get ammonia water or acids in, wash it per-

fectly clean, fill it full, lacking about as much as a tablespoonful, then tie the stopper in by means of a cloth put over the top, pack it carefully and ship it to me by express prepaid, I will make sufficient examination of the water to ascertain what it contains. To wash the bottle clean as specified above, there must, of course, be nothing visible sticking to it inside; then you should fill it entirely full of the water, pour this out completely, then rinse the bottle five or six times more with the water from the well before putting in the water to send to me.

"As to the effect upon you when you went down into the well, it is possible that the well contains carbonic acid gas or, as it is sometimes called, 'choke-damp.' You might test it by lowering a lighted candle into the well, which will be extinguished if a dangerous amount of the gas is present."

Stands Up for Osborne County.

A. L. Brown, of Osborne, Kans., is one of the real estate agents of Kansas who makes a business of selling his home land exclusively. He deals in nothing but Osborne County farms,



and by square business methods has built up one of the best real estate businesses in Kansas. He believes in a great future for Osborne and Osborne County which lies in the great Solomon Valley where alfalfa, corn, wheat, oats and grasses grow in abundance. If you are looking for land write Mr. Brown and mention the KANSAS FARMER. He will furnish you full information.

When writing advertisers please mention Kansas Farmer.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

T If you want to know all about
E TEXAS and TEXAS E
X lands write for free sample
A copies of the TEXAS STOCKMAN
S & FARMER, San Antonio, Tex.

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the North-west. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),
Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.
Mention Kansas Farmer when you write.

Western Kansas Wheat Farms

Deal with the owner direct. Save commissions. Know you are getting your land at the right figure. We own and control 60,000 acres of the finest wheat and corn lands in central and western Kansas. We have one price for everybody. You can buy a farm on ten years' time with interest at 6 per cent, or you can pay cash and get 5 per cent discount. Our farms are bargains, every one of them, and are in the best counties of Northwestern Kansas; close to schools, railroads, towns and churches, in well settled localities. If you have \$300, you can own a farm and home of your own. No poor land.

The Grain Belt Realty Company, Concordia, Kansas



Wheat field on farm of Samuel Cox, Radison, Sask.

BUY A CANADA WHEAT FARM

MORE THAN ONE HUNDRED THOUSAND AMERICAN FARMERS are going to Western Canada this year. THE GOLDEN GRAIN BELT of the world. Twenty-two years without a crop failure. We offer you from which you can MAKE YOUR OWN SELECTIONS

THE ENTIRE CANADIAN NORTHERN RY. LAND GRANT

located in THE FAMOUS SASKATCHEWAN VALLEY

THE CARROT RIVER VALLEY and THE GREAT SASKATCHEWAN PLAINS

At From \$8 to \$10 an Acre

Rich, Virgin Prairie, Deep Loam Soil, Clay Sub-Soil well adapted to diversified farming. This is the best undeveloped prairie land on the continent, and the greatest Hard Wheat District in the world. Write for free maps, pamphlets, etc. Mention this paper and we will send you a copy of our 1906 "Bread Basket."

SASKATCHEWAN VALLEY & ALBERTA LAND CO. Ltd.

LARGEST LAND COMPANY IN THE WORLD WINNIPEG, CANADA

A. D. DAVIDSON, Pres. A. R. DAVIDSON, Vice-Pres. A. D. MCRAE, Sec'y-Treas.

A Farmer in Real Estate

FRANK C. CLARK

No. 506 Chamber of Commerce Bldg., Los Angeles, Cal.

F FARMS STOCK, GRAIN,
FRUIT, VINE,
YARD, TRUCK.

CENTRAL AND NORTHERN
CALIFORNIA LANDS :: :: :

WE GIVE YOU TEN YEARS TIME

In which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices.

Write for full information, FREE.

THE UNION PACIFIC LAND CO.,

Department F. Omaha, Nebraska.

Department F. Omaha, Nebraska.



FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

TREES THAT ARE CHEAP in price and of the best quality, free from disease and true to name. Com-
25 Grafted Apple Trees \$1.00
25 Grafted Peach Trees \$1.00
50 Concord Grape Vines \$1.00
FAIRBURY NURSERIES, Box L, Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES Small Fruits and Evergreens. Russian Mulberry and Black Locust \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamng and Riley's Favorite, best pedigreed and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois

Trees, Plants & Seeds THAT GROW
Best quality. Good bearers. Low prices. Apple 4c; Plum and Cherry 12c; Peach 4c; all budded; Concord Grapes 2c; Forest Tree Seedlings \$1.00 per 1000. **GERMAN NURSERIES**, Can Sondergger, Prop., Box 9, Beatrice, Neb.

HARDY EVERGREENS We grow them by the million. To prove they are healthy and vigorous we offer 12 Spruce and Fir Seedlings FREE to property owners. Mailing expense 6c, whether send or not. A postcard will bring them. Catalogue, English or German, free. Write for it today. Address GERMAN NURSERIES, Box 9, Beatrice, Neb.

Iowa Produces the Best **SEED CORN**

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 54, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo.

GOOD SEEDS CHEAP
BEST EVER GROWN

A wonderful big catalog Full of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds. Big Lot of Extra Packages Free to Every Customer. Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

A Proposal
To give advice if needed. Lay out your plans and start your team, and if anywhere along the route, between planning and cropping, you need help, just draw on our accumulated capital of 50 years' experience. At the start off you will need good seed. Catalogue free. J. J. H. GREGORY & SON, Marblehead, Mass.

TENERIFFE Canary Grass
A wonderfully productive grass from the Canary Islands. Succeeds in all parts of America from Florida to Manitoba, even in sections where Millet fails. Produces an immense crop of hay as well as a large and very profitable seed crop which can be sold at a high price, there being practically no limit to the demand. Is used for feeding birds and poultry and also makes a fine grade of flour. Our seed is especially desirable for sowing here. Special introductory price per large pkt., 10c, 1b, 3 lbs., 90c, postpaid, with full directions for growing. **Free to Farmers.** We want every one to try it and if you will mention this paper in writing us we will send a sample of the seed free together with a copy of our large illustrated catalog of Farm and Garden Seeds.

IOWA SEED CO., DES MOINES, IOWA.

THE KANSAS FARMER

Horticulture

Spray For Profit.

PRESS BULLETIN NO. 129, OKLAHOMA AGRICULTURAL EXPERIMENT STATION.

The following information, regarding spraying, is intended for the grower, that he may see at a glance what to apply and when to make the application. Only the more serious pests are named, but other pests are kept in control by the spraying advised. The greatest success will come by preventing rather than by attempting to cure. Sometimes, spraying does not seem to be necessary, but the time has come when the man who does spray, regardless of appearances, will not suffer the losses of his less careful neighbor. Plant injuries are rarely cured. The fruit-grower should prevent them. He should know the cause, know the remedy, and know when to apply the latter so as to prevent losses. Spraying is as necessary a practice as cultivation and pruning. Get the spraying apparatus in shape before spring farm work begins. If necessary to purchase, send for circulars to those companies advertised in your farm papers. There is no best pump or nozzle. Some devices are better for particular kinds of work. Know what you want the machine for, and buy with that in view. The kind of machine will depend upon the kind of plants to be sprayed and the kind of spray to be used. It does not pay to get other than a good pump, one that works easily and has power enough to throw the spray in a fine mist, at the same time, keeping the solution thoroughly agitated in the barrel or tank.

Be ready to spray this year. It is good insurance and will pay good returns on short time.

Begin to spray the orchard and vineyard before the buds swell in the spring and repeat the operation every two weeks for at least four times, and the result will be a saving of from 85 to 95 per cent of the crop.

If spraying solutions are correctly made and applied, there need never be any danger of poisoning the fruit for food. Fruit to be placed upon the market should be sprayed the last time with a solution that will not discolor it.

Bordeaux mixture will destroy fungus diseases and Paris green will kill insects. These two sprays may be easily combined, making a solution called Paris green Bordeaux, which when sprayed upon the trees will have the same result as Paris green and Bordeaux mixture when sprayed on separately.

The following treatments are general for the named classes of fruits, but if carried out each year by the orchardists and agriculturists in the same way that they would carry out cultivation, rotation or fertilization, it will mean the saving of thousands of dollars to their income each year, in Oklahoma alone. The diseases and insects, although they have not been here long, have come to stay, and will be even more troublesome from year to year.

Look over the following groups of plants to see what to do and when to do it for that particular group.

APPLE ORCHARD.

1. Spray with copper sulfate just before buds start in the spring, for bitter rot, black-rot and scab.

2. Spray unfolding leaves with Paris green Bordeaux for bud-moth and apple-scab.

3. Spray as soon as the blossoms fall with Paris green Bordeaux for codling moth, curculio, canker-worm, caterpillars, scab and sooty blotch.

4. Keep the foliage well covered with Paris green Bordeaux until fruit is nearly grown, for succeeding broods of insects and further fungus troubles.

When the fruits is nearly matured, a spraying with ammoniacal solution of copper carbonate will have nearly the same effect as Paris green Bordeaux, and will not discolor the fruit.

Do not put copper sulfate on the trees after the foliage is out.

Flat-headed and round-headed borers burrow in the base of the trunk. Watch trees and cut out borers whenever castings appear.

Keep all windfalls picked up and destroyed or feed out.

CHERRY, PLUM, PEAR, APRICOT AND PEACH

1. Spray with Bordeaux mixture before the leaves unfold.

2. Spray with dilute Bordeaux mixture just after the blossoms fall.

3. Spray with dilute Bordeaux mixture two weeks after the second spraying.

Dilute Bordeaux mixture is used for the second and third sprayings because of the tender foliage of this group of

trees. Pears may be, however, sprayed each time with the Bordeaux mixture.

These sprayings will be effectual for leaf-spot, mildews, leaf-curl, scab, brown-rot and plum pockets.

In case of pear blight, winter-prune all diseased branches, cutting off several inches below the diseased area. Several weeks after blossoming, remove all young dead twigs in the same way. Use a knife that is sterilized from time to time by wiping it with a cloth saturated with carbolic acid. The disease occurs also on apple and quince. Use the same treatment.

BLACKBERRIES, RASPBERRIES, DEWBERRIES.

1. In fall or winter remove all canes infested with cane-borers, orange rust, and crown-gall, and burn.

2. In spring, before the buds swell, cut off and burn all canes badly spotted with disease and spray the rest with Bordeaux mixture, repeating the spraying when the young shoots are about six inches high, and again in ten to fourteen days. Aim to cover the young shoots with spray. This treatment is for anthracnose, cane-blight, and leaf-spot diseases.

STRAWBERRIES.

Spray with Bordeaux mixture before blossoming and twice after the fruiting season.

In fall run over badly infested beds, add a little straw and burn.

Frequently renew beds.

These treatments will keep the crown-borer and the leaf-spot diseases in check.

GRAPES.

1. Spray before buds break in the spring, with copper sulfate.

2. Spray just before blossoming with Paris green Bordeaux.

3. Spray after fruit has set, with Paris green Bordeaux.

4. Continue spraying every ten days up to July 1, with Bordeaux mixture.

5. Spray three times from the first of July to the middle of August with ammoniacal solution of copper carbonate. This last solution will not discolor the fruit for market.

These sprays, if carried out, will be sufficient to hold in check the flea-beetles, leaf-rollers, caterpillars, birds-eye rot, black-rot, downy mildew, powdery mildew, and ripe-rot.

GARDEN VEGETABLES.

Spray with the following Paris green, when the insects appear:

Cabbage for cabbage-worm; cucumbers, squash, pumpkins, and melons, for the striped cucumber-beetle; tomatoes, for the tomato-worm.

Spray potatoes with Paris green Bordeaux for the Colorado beetle and the flea-beetles, when they appear. This spray will also prevent the potato blight.

Potato scab is treated by soaking the seed potatoes in formalin (1 pint in 30 gallons of water,) for about two hours. Treated potatoes should not be placed where they will get reinfected with scab spores.

Spray any of the vegetables with soap or kerosene emulsion for plant lice and any other of the plant bugs that suck the juices from the plants. Care must be taken to reach every insect on the under side of the leaves.

GRAINS.

Oats—Smut can be successfully treated by soaking the seed 8 to 10 minutes in hot water at 132-135 degrees F., or sprinkling with formalin (1 pint in 50 gallons of water) thoroughly stirring during the process, leaving in piles for several hours, then spreading out to dry.

Corn—Smut in corn cannot be prevented by seed treatment. Use varieties of corn most exempt from attack and avoid use of fresh manure on land giving the most trouble.

Corn-worms can be destroyed only by hand-picking.

Wheat—The Hessian fly can be controlled by delaying fall planting until after October 10. Fall grazing of wheat lessens the number of pests.

Burn over all infested land in fall, winter, or spring to kill hibernating chinch-bugs. When chinch-bugs migrate from the wheat to the corn, after the former is harvested, plow a dust furrow between the two fields, and cut a few rows of corn and lay-in piles on the edge of the field toward the wheat.

Stored grain—Weevils in stored grain in tight bins, can be destroyed by use of carbon bisulfid placed in vessels on top of the grain, the latter not over two feet thick, at the rate of one pound to 100 bushels of grain.

SHADE TREES AND ORNAMENTAL SHRUBS.

All leaf-eating insects can be destroyed by spraying with Paris green the foliage they eat.

Leaf lice and other sucking insects should be sprayed with soap or kerosene emulsion.

Borers in maple and elm can be successfully treated in September, by in-

SEEDS That will Grow **PLANTS**
None better, even at the high prices. Special bargains: **SEEDS**, 10 pkts. **Annual Flower**, 10c; 5 pkts. **PLANTS**, 6, 12, 25c; **Geraniums**, 25c; 6 Begonias, 25c; 4 Pelargoniums, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Pansies free.

A. C. ANDERSON, COLUMBUS, NEBRASKA.

BARGAINS IN SEEDS
Choice kinds of Vegetable and Flower Plants at 2 cents per Packet. Flower Plants, 6 cents each. Many choice novelties. Don't buy until you see our **New Catalogue**. Mailed **FREE** if you mention this paper.

IOWA SEED CO., DES MOINES, IOWA.

TREES Small Fruits & Nursery Stock
DIRECT FROM THE NURSERY
At Wholesale Prices.

You get what you order, and save half your money. Lists free. JOHN F. DAYTON, WAUKON, IOWA.

Buy Your Trees Direct

WHOLESALE and save agents' commission of 40 per cent. **PRICES** We have direct connections with all points in Kansas, Missouri and the Southwest, and deliver all orders promptly and in good condition. Our stock is True to name, and especially adapted to these localities. Write for wholesale price list. Wichita Nursery, Box B, Wichita, Kansas.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

Klondike Famous Cucumber

For flavor, uniform size, color, and productivity, it is absolutely unequalled.

In addition to this it comes into bearing very early, continuing right through the season until killed by frost. Always straight—never turning yellow. Best for the table, for market and for pickling. Large sample packet for only 5c or 10c, including copy of our grand new

FREE BOOK
"Northern Grown Seeds"

Plants, Bulbs, Fruits and Trees. Contains all the good things for the Garden and Farm worth growing at the right prices. Don't fail to secure the Book. Write today.

L. L. MAY, St. Paul, Minnesota.

A WOMAN FLORIST
HARDY EVERBLOOMING 6 ROSES On their own roots. ALL WILL BLOOM THIS SUMMER. 25c

Sent to any address post-paid; guaranteed to reach you in good growing condition.

GEM ROSE COLLECTION

Burbank, deep rose.

Cardinal, bright red.

Killarney, grandest pink.

General McArthur, deep red.

Snowflake, pure white.

Bouquet of Gold, golden yellow.

SPECIAL BARGAINS

6 Carnations, the "Divine Flower," all colors, 25c.

8 Prize-Winning Chrysanthemums, . . . 25c.

8 Beautiful Coleus, . . . 25c.

4 Grand Orchid Cannas, . . . 25c.

8 Sweet-Scented Tuberoses, . . . 25c.

6 Fuchsias, all different, . . . 25c.

10 Lovely Gladioli, . . . 25c.

10 Superb Pansy Plants, . . . 25c.

15 Pkt. Flower Seeds, all different, 25c.

Any Five Collections for One Dollar, Post-Paid.

Guarantee satisfaction. Once a customer, always one. Catalog Free.

MISS ELLA V. BAINES, Box 221 Springfield, Ohio.

15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer, that will flower for the next 10 years with plenty of beautiful flowers.

1 Clump Mixed Hollyhocks . . . All Colors, 25c

1 Clump Mixed Sweet Williams . . . " 25c

1 Clump Mixed Baby Breath . . . " 25c

1 Clump Mixed Ragged Robin . . . " 25c

1 Clump Mixed Crysanthemum . . . " 25c

1 Clump Mixed Dianthus . . . " 25c

1 Clump Mixed Golden Glow . . . " 25c

1 Clump Mixed Poppy . . . " 25c

1 Clump Mixed Bleeding Heart . . . " 25c

1 Clump Mixed Coreopsis Harvest Moon . . . " 25c

1 Clump Mixed Heileanthus . . . " 25c

1 Clump Mixed Dalias . . . " 25c

1 Clump Mixed Hardy Asters . . . " 25c

1 Clump Mixed Hardy Iris . . . " 25c

This entire collection, worth \$5.00, . . . \$2.00

for only . . .

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, MALDEN, MASS.

HEALTHY TREES Honest in quality. Grafted Apples, Buds, Peaches, Concord Grapes, \$2 per 100; Black Locust, Complete Ripe Mulberry, \$1 per 1000. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.

Seed Oats
50¢ a bushel and up. The cheapest, heaviest, best yielding Oats are Ratekin's Reliable Grown, pure stock, Ratekin's New Sensation, Early Champion, White Russian and Texas Red Rust proof. Write for big catalogue, gives full descriptions of these oats, and all farm seeds, free. A postal will bring it. Address Ratekin's Seed House, Box 19, Shenandoah, Ia.

Most Extensive Grower of
Grape Vines
In America.
CAMPBELL'S EARLY - The Best Grape
producer JOSSELYN, - - - The Best Gooseberry
of PAY, - - - - The Best Currant
Small Fruits. Catalogue Free.
GEO. S. JOSSELYN, Fredonia, N.Y.

FERRY'S SEEDS
Make sure a yield of quantity and quality. When your father planted Ferry's, they were the best on the market, but they have been improving ever since. We are experts in flower and vegetable seeds. 1906 Seed Annual, beautifully illustrated, free to all applicants.
D. M. FERRY & CO., Detroit, Mich.

EVERGREENS AND FOREST TREES
That are Sure to Satisfy. When you buy Hill's trees you get honest value - highest quality. My catalogue is my salesman; it's free. Contains 48 pages illustrated with beautiful pictures; describes all kinds of nursery stock for all purposes - hedges, windbreaks and ornament. Also fruit trees, shrubs and vines. 50 Best Bargains ever offered - \$1.00 to \$10.00 per 100 Prepaid. Everything first-class, guaranteed exactly as represented. Write for catalog today.
D. HILL, Evergreen Specialist
Dundee, Ill.

20 HARDY PLANTS \$5.00
Shrubs and Running Vines
1 Syringa (Lilac) 1 Rhododendron
1 Japan Snowball 1 Azolla Molle
1 Double Aitheas 1 Weigela
1 Double Flower Almond 1 Rose of Sharon
1 Hardy Hydrangea 4 ft. 1 Japan Honeyuckle
1 Double Mock Orange 1 White Star Clematis
1 Double Purple Fringe 1 Dutchman Pipe
1 Forsythia Beautiful 1 Ampelopsis
1 Lilac, white and purple 1 Boston Ivy
1 Deutzia
1 Bridal Veil
20 Hardy Plants from 4 to 5 ft. tall. This entire collection only \$5.00. Send your order early and we will send this fine collection, worth twenty-five dollars, enough plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.
NATIONAL PLANT CO., Somerville, Mass.

42 Plants \$2.50
10 Currant Bushes 10 Gooseberry Bushes
10 Raspberry Bushes 10 Blackberry Bushes
1 Concord Grape Vine 1 Niagara Grape Vine
Greatest bargain yet, 42 plants, all grown, ready to bear fruit, for only \$2.50. Every one should have these lovely fruits growing in their garden. Now is your chance. Order early, and be sure of them.
BAY STATE PLANT CO., Boston, Mass.

jecting carbon bisulfid into the burrows and stopping them up tight.

Make your sprays according to the following formulae.

FUNGICIDES.

These solutions are designed for the destruction of the fungus diseases. They can be effectual only when they reach the fungus itself. They must, therefore, cover all parts of the affected plants. The solution will not penetrate the tissues of the plant and kill the diseases on the interior, but is effectual, more as a preventive against the entrance of the disease fungus into the plant, than a curative when the fungus has established itself in the tissue of the plant.

BORDEAUX MIXTURE.

Four pounds copper sulfate (blue vitriol); 4 pounds quicklime (not air-slacked); 40 gallons water.

Dissolve the copper sulfate in hot water, or from a coarse bag suspended in cold water; slack lime separately. Dilute copper sulfate solution to about twenty gallons, into which pour the lime, diluted to about ten gallons, stirring the mixture. Dilute further now, to make 40 or 50 gallons. Stock solutions of the copper sulfate or lime, (rate 1 lb. to 1 gallon of water) can be kept indefinitely, but will not keep when mixed. After spraying, the solution left over should be thrown away.

DILUTE BORDEAUX MIXTURE.

Two lbs. copper sulfate, 2 lbs. quicklime (not air-slacked), 50 gals. of water. This is made as Bordeaux mixture.

AMMONICAL SOLUTION OF COPPER CARBONATE

Five ozs. copper carbonate, 3 pints of ammonia, 50 gallons water.

Use just enough ammonia (if strong dilute with several volumes of water) to dissolve the copper carbonate, then dilute to final volume.

COPPER SULFATE.

Three to 4 lbs. copper sulfate, 50 gallons water.

This strength can be used only as a winter spray; sometimes a weaker solution, 1 lb. to 250 gallons of water, is used on the foliage.

INSECTICIDES.

These solutions are used to destroy insects and are not effectual for the destruction of fungus diseases. Insects that chew the foliage can be poisoned through the stomach, while those that pierce the stems and leaves of plants must be poisoned from the outside. The arsenic compounds in the form of Paris green are the standard poisons to be used against the leaf-chewers, while soap and kerosene are the standard substances to use against the plant-sucking insects. Hellebore is used in the same way as arsenic compounds and is preferable to them in cases where a less violent poison is needed.

PARIS GREEN.

One pound Paris green, 3 lbs. lime, 100 gallons of water.

Hellebore may be dusted on the plants or mixed with water, 1 oz. in 2 gallons.

SOAP.

One lb. of soap, 8 gals. water.

KEROSENE EMULSION.

Two gals. kerosene, ½ lb. common soap, 1 gal. water. Dissolve the soap in hot water, add the kerosene, and churn all together until a white, creamy mass is formed which thickens on cooling. Dilute nine times before using.

LIME, SULFUR AND SALT WASH.

Thirty lbs. lime, 15 lbs. salt, 20 lbs. sulfur, 60 gals. water.

Boil for one hour in an iron kettle, and apply while fresh to dormant trees in fall or spring to kill the San Jose scale-insects.

FUNGICIDE AND INSECTICIDE.

PARIS GREEN BORDEAUX.

Fifty gals. Bordeaux mixture, made as above, 4 ozs. Paris green.

Mako up when ready to use. It will not keep.

Congo Roofing.

Congo, the never-leak roofing advertised elsewhere in these columns, has an excellent reputation to back up its name.

It is thoroughly water-proof, wind-proof and frost-proof. It never loses its pliability and is practically indestructible. It comes in one-half, one, two and three ply, and every kind of a building from chicken-coops to railroad stations, can be satisfactorily roofed with one or another of these grades.

No one who intends to do any roofing this spring should fail to see a sample of Congo. The makers will send you sample and booklet on request.

Address Buchanan-Foster Company, 724 Drexel Building, Philadelphia, Pa.

All men think all men mortal but themselves.—Young.

SEED CORN--REID'S YELLOW DENT AND BOONE COUNTY WHITE

This is not elevator corn, but real seed corn. Hand selected, tested and thoroughly graded. Good as you would select yourself. Sent on approval. Sample and catalogue free. Low Gap Seed Corn Farm, Arbela, Mo.

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

McBETH & KINNISON

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni, Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

ALFALFA SEED

Kansas Grown. Non-Irrigated. From grower to consumer. Write for prices.

MEADE, KANSAS

SEEDS

DIRECT TO CONSUMER—LOOK AT THESE PRICES: Red Clover, per bu., \$8.50; Alfalfa Seed, per bu., \$8.25; Timothy Seed, per bu., \$1.65; Fancy Kentucky Blue Grass Seed, per bu., \$1.75; Millet, Cane, Kafir-corn. Every thing for Farm and Garden. Also Poultry Foods, Oyster Shell Grits, Cracked Bone, etc. Seamless bags, 20 cents each. Low prices and choice goods. Write me.

T. LEE ADAMS, 417 Walnut St., Kansas City, Mo.

La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

BEST FOR THE WEST

Plant the seed best adapted to your soil. The Missouri Seed Co. have made a study of the kind of seed best adapted to the old and new sections of the West and Southwest, and handle no other. Be sure to get our large seed book. No better seed grown for irrigated ground. Address

MISSOURI SEED CO., 1427 St. Louis Ave., Kansas City, Mo.

SEEDS FREE

also a Packet of a Rare Variety and a Beautiful Rose Bush in addition if you will send at once for our new 1906 seed catalog. Just enclose with your request a dime or five 2c stamps to cover postage and packing, and we will do the rest. Our 1906 catalog will save you money, save you disappointment because our high-grade, pure-bred seeds always grow. Many new varieties that will interest you this year in garden, flower and field seeds. Don't wait—send today. A. A. BERRY SEED CO., BOX 37, CLARINDA, IOWA

HARDY ROSE BUSHES

Live Out Doors, Summer and Winter.

10 ROSE BUSHES \$1.50

1 General jacqueminot (Brilliant Red).
1 American Beauty (Red). Beautiful.
1 Magna Charta (Pink). Extra.
1 Mrs. John Lang (Soft Rose).
1 Ulrich Brunner (Cherry Red).
1 Pearl des Blanches (White).
1 Moss Rose (Beautiful Red).
1 Celine Forestier (Yellow). Fine.
1 Sweet Briar (Sweet Scented).
1 Crimson Rambler (Large, Beautiful, Running Rose).

Ten of the choicest varioiles, 3 and 4 years old Rose Bushes, only \$1.50. The regular price for these bushes is seventy-five cents each. This is a great bargain. You will notice that this collection has very choice, beautiful shades. All green, packed in moss. True to name. Do not miss this grand offer.

ORDER QUICK, and get this fine Collection imported from Holland. These bushes are grafted. They will flower this year.

WAYSIDE NURSERY, Somerville, Mass.

High-Grade Flower Seeds.

20 Packages 10 C. FOR

KINDS. KINDS. KINDS.
1st Button, 10 Poppy, 18 Portulaca, 20
10-Weeks Stock, 6 Candytuft, 10 Marigold, 18
Echelmanholtzia, 6 Aster, 16 Pansy, 10
Sweet Alyssum, 12 Zinnia, 12 Sweet Peas,
Sweet William, 10 Hollyhock, 12 Pinks, 10
Larkspur, 12 Petunia, 19
Nasturtium, 10 Callophrys, 8
Sweet Mignonette.

All the above sent to any address, post-paid, for 10c, silver or six two-cent stamps. As a premium to introduce our seeds into every household, we will also send a collection of one beautiful bulb FREE with Catalogue.

Somerville Nursery,
SOMERVILLE, MASS.

Modern Silage Methods

This is the title of our new 216 page book, telling everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to entrap fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write once.

SILVER MFG. CO.,
Salem, Ohio.

POULTRY BREEDERS' DIRECTORY

RUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmans, M. B. turkeys, and Toulouse geese. From prize-winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovette, Proprietor, Mullinville, Kansas.

S. C. RHODE ISLAND RED EGGS—Farm range, \$1.00 per 16; pen, \$2.00 per 16. I. W. Pulton, Medora, Kansas.

WHITE PLYMOUTH ROCK EGGS—from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bestwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans., 225 Main Street.

S. C. B. LEGHORNS, 15 pure-bred cockerels, \$1.00 each. Eggs for sale. I took first at State Poultry Show. Mrs. Siler Seal, Meriden, Kansas.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, peacocks. Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons. White, Buff and Brown Leghorns. White, Buff and Silver Laced Wyandottes. Games, Golden Sebright Bantams. Pearl and White guineas, hunting dogs. Poultry eggs, 15 for \$1. Write D. L. Bruen, Plate Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs, 5 cents each. \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeder of the choicest birds. Eggs \$1.50 per 15. Member American White P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Raft, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen. No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreter, Aragona, Kans.

PURE Single Comb Brown Leghorn eggs, 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

BLACK LANGSHANS—Hens scoring 92 and upwards—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs \$2 for fifteen; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kans.

BUFF PLYMOUTH ROCK EGGS—for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kans.

FOR SALE—4 pair of White China geese; also 3 Bronze turkey toms. Mrs. W. J. Grist, Ozawake, Kans.

BUFF COCHINS—25 rich colored, heavy feathered cockerels and pullets, half price. Eggs \$2 per 15; \$3.50 per 30. Imperial Pekin drakes \$1 each. H. A. Thomas, Scranton, Kas.

BARRED AND WHITE ROCK EGGS—for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Weida, Kans.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kans.

MY R. I. REDS won seven prizes on eight entries at Kansas City. Circular. H. C. Kellerman, 3516 Smart Ave., Kansas City, Mo.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kans.

WHITE WYANDOTTE EGGS—for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kans.

PURE-BRED Barred Plymouth Rocks at reasonable prices. J. A. Sawhill, Edgerton, Kans.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kans.

FOR SALE—Young M. B. Turkey toms from high-scoring, prize-winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minoras, \$1 per \$15. Vira Bailey, Kinsley, Kans.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kans.

MAMMOTH BRONZE GOBLERS—Extra nice large young toms, \$5 each. Buy one to improve your flock. C. E. Durand Plantation, Hutchinson, Kans.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

CHOICE R. P. ROCK cockerels and pullets, Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emder geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kans.

FOR SALE—Exhibition S. C. Black Minoras cockerels \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD BRED SINGLE COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First Street, Newton, Kans.

S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Ave., Topeka, Kans.

BARRED AND WHITE PLYMOUTH ROCK EGGS, \$2 per 15, \$5 per 45. Hawks and Bradley strains, scoring 93½ to 94½. Mr. and Mrs. Chris. Pearman, Ottawa, Kans.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larne, Kansas.

BLACK LANGSHAN EGGS—from birds scoring from 93½ to 95½. \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

FOR SALE—Choice S. C. B. Leghorn cockerels, \$1 each. J. N. Sheldon, Route 1, McPherson, Kans.

The Poultry Yard

Poultry Notes.

At the annual meeting of the American Poultry Association held recently at Cincinnati, Ohio, Grant M. Curtis was elected president and T. E. Orr re-elected secretary and treasurer. Several new breeds were admitted to the Standard, viz., Rose Comb Rhode Island Reds, Columbian Wyandottes, Rose Comb White, and Single Comb Black Orpingtons.

Three judges have already been engaged for the next State Poultry Show, January 7 to 12, 1907, viz., Chas. McClave, New London, Ohio; D. T. Heimlich, Jacksonville, Ill.; and A. B. Shaver, Lanark, Ill. These gentlemen have a National reputation as experts in judging poultry. Mr. McClave has been president of the American Poultry Association, the highest honor in poultrydom, and all were judges at the World's Fair. Owing to the favorable outlook for a bigger show than ever, it may be necessary to have another judge. An effort will be made to get the breeders of the leading varieties of fowls to contribute towards a special purse to be offered to their breed. The secretary has already authorized A. H. Miller, of Bern, Kans., to take care of the interests of the Barred P. Rocks and will shortly appoint breeders of other varieties to look after their breeds. By working in unison we can get up a big show.

This is the time of year when siting hens are in demand, but, as usual at this period, they are a scarce commodity. Their scarcity, however, can be overcome by the purchase of a good incubator, of which there are several on the market.

One good thing about the incubator is that it is always ready to set, no matter how cold or severe the weather, and it would seem to be a matter of economy as well as convenience for every poultry-raiser to purchase one, and allow the hens to lay eggs and thus get rid of the necessity of a sitting hen.

A Farmers' Institute Talk on Commercial Poultry Culture.

The poultry industry is one of great importance, and one at which many fail because they do not count the cost. They start in it in a haphazard sort of way, not knowing the amount of capital necessary to start and maintain a successful plant. The person who is successful is the one who counts the cost beforehand, and who knows just how much he has to invest. Then he makes up his mind as to whether he is adapted to the work, whether he has patience to work and wait for returns, and whether he really loves fowls. For a successful person knows that unless he is suited to his business and loves it well enough to give it undivided attention, it will never be a success.

After studying these questions and conditions, and finding that he has suf-

POULTRY BREEDERS' DIRECTORY

BARRED ROCKS EXCLUSIVELY—Left strain. Large, heavy boned, fine, clear; Barry's first-class birds, \$1 to \$6 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards John D. Ziller, Hiawatha, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue Ribbons at Great Bend, Emporia, Wichita; 15 for \$2. W. C. Watt, Walton, Kans.

LOOK HERE—TRY me on the big-boned Black Langshans, scoring from 90 to 95%. Charles Leeper, Harper, Kans.

WHITE WYANDOTTE COCKERELS, (Stay White) \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larne, Kans.

MA MAMMOTH Bronze Turkeys, Silver Laced Wyandotte cockerels for sale. Address Francis Long Madison, Kans.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Flemine, Fontana, Kans.

SINGLE COMB WHITE LEGHORN cockerels \$1 each; two or more 80 cents each. Fine white geese, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin, fine, pure and vigorous; hens, cockerels, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Conifer, Ill.

FOR SALE—150 B. P. R. and W. P. R. cockerels and pullets; strong, vigorous, cockerels, \$2 to \$6; pullets, \$1 to \$2.50. Exhibition cockerels matter of correspondence. Mr. and Mrs. Chris Bearman Ottawa, Kans.

BROWN CHINA GESE, Indian Runner Ducks also Barred Rock Cockerels. Prize winners at State Poultry Show.

O. C. Schrister, Meriden, Kansas

MAMMOTH BRONZE TURKEYS for sale. Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kans.

LIGHT BRAHMAS More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver, Blue Mound, Kansas

High Class Buff Leghorns and Barred Plymouth Rocks

We furnish as good stock as any breeder in the world. Exhibition stock a specialty. Write for prices to S. O. LINNEGREN, McPherson, Kans.

Buff Orpingtons S. C. Pure Bred, Cook Strain

Eggs for setting, \$2 per 15. Order now. My stock is from Wm. Cook & Sons, originators.

F. V. Turner, Sabetha, Kansas

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain," noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kans.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Pullets and Cockerels for sale. Pullets scored 93½, Cockerels 92½. Eggs for sale.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention KANSAS FARMER when writing.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas.

Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. C. MILLER, Breeder.

Stock for sale. Fifteen eggs for \$2. Address

546 Missouri St., LAWRENCE, KANS.

POULTRY BREEDERS' DIRECTORY

Light Brahma Chickens

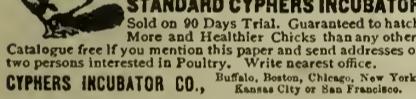
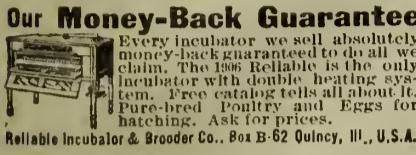
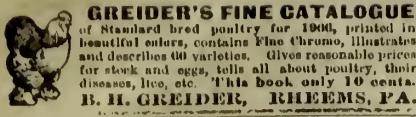
Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—Fine stock; farm raised. Price, \$1 for 15; special price by the hundred. Shipped by express, carefully packed, anywhere. Mrs. O. E. Walker, Route 8, Topeka, Kans.

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430,



This 230 Egg Incubator



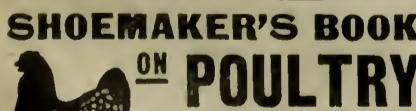
We Pay the Freight

East of the Rockies.

Here's an offer never before equalled. The famous

Royal Incubator

sold on trial, freight prepaid. Guaranteed in every way.
Automatic control of heat and ventilation. Perfect hatching
assured. Doubles your poultry profits. Don't pay more for
similar and poorer incubators. Get the best at freight-
paid bargain prices. Investigate before you buy. Fine cat-
alog of incubators, brooders, poultry and all supplies free. Booklet
"Preparation and Feeding of Chicks," 16c. Sixty-page paper one yr. 10c.
Royal Incubator Co., Drawer 66, Des Moines, Ia.



AND ALMANAC FOR 1906.

There is nothing in the world like it. It con-
tains 22 large pages, handsomely illus-
trated. A number of most beautiful colored
Plates of Birds true to life. It tells all
about all kinds of Thoroughbred Fowls,
with life-like illustrations, and prices of
same. It tells how to raise poultry successfully, and how to
treat all diseases common among them. It gives working plans
and illustrations of convenient Poultry houses. It tells all about
Incubators and Brooders.

It gives full instructions for operating all kinds of Incubators.
This chapter is marvelously complete, worth dollars to anyone
using it. It gives descriptions and prices of Incubators,
Brooders and all kinds of Poultry Supplies. In fact, it is
an encyclopedic handbook and will be useful to anyone
receipt of only 15 cents. Your money returned if not pleased.
C. C. SHOEMAKER, Box 492 FREEPORT, ILL.

SCOTCH COLLIES.
SCOTCH COLLIES—Scotch Collie pups from reg-
istered stock for sale. Emporia, Kansas, W. H.
Richards, V. S., Emporia, Kansas.

ficient capital and is suited to the busi-
ness, he then enthusiastically sets to
work to start his ranch. In the selec-
tion of his birds he uses great care,
for he knows just the kind he likes
best. If it is an Asiatic, Mediterranean,
American, or English class, he knows
which he likes best and studies their
habits and wants. After he has selected
the kind of bird he wants, he studies
its wants, habits and requirements
in order to achieve the best results.

In the selection of his poultry ranch,
the successful man does not look up at
the skies, or surrounding country, and then say: "This is a fine place for my
chickens;" but he studies the country,
climatic conditions and so on, before he
decides. The man who studies the habi-
ts of fowls, will know what they want
and how many to put in a colony—that
is, if he separates them, and he must
do that in this country, and he will
know how many to put in a colony. Few
people think that two hundred
hens might be crowded on two acres,
but it is true nevertheless. It is not
so much the amount of ground as the
conveniences for the hens. There may
not be sufficient shade, dust baths,
roosting places, or water for all, and
it is necessary that all these things
be made to suit the convenience of the
number of hens, regardless of the num-
ber of acres. I know a farm where
two hundred hens run on seven acres,
and yet are crowded, for they have not
sufficient conveniences. Few have a
place to dust at all, few ever bathe, and
there are roosts for only about forty,
when there are two hundred.

Among the conveniences necessary
for poultry must be mentioned the dust
baths. When a hen is happy she wants
to fix her toilet, and she wants to dust
herself. If you do not think a hen
wants to dust herself, just open the
garden gate after you have hoed your
lettuce bed and watch "Biddy" go for
dust; therefore, the successful man
keeps dust pans for his hens. He
should occasionally dampen this dust
pan, for the dust accumulates and a
happy hen wants to remove this. Af-
ter a shower, you have seen hens make
for the water. They stay in it a little
while and then shake themselves thor-
oughly.

Next is shade. A hen requires it,
not entire shade. You have, I know,
seen little chickens in partial shade;
they like to lie under trees where the
sun comes through the branches.

The kind of house necessary is another
important item on the ranch. The
successful man knows just the kind of
a house necessary for hens, how large
it must be. For if a hen is crowded
and passes an unsatisfactory night, it
is readily told in her egg record. If
you neglect her, she will as surely neg-
lect you as that she and you are alive.
Therefore the house and roosts must be
made to suit the convenience and com-
fort of the flock. Then the sanitary
condition of his flock is a matter of
importance. He knows just what to
use to keep his house and his birds in
a sanitary condition, and he is not
afraid to do what he knows is for their
good—and what man can look an hon-
est hen in the face. If everything about
the place is filthy. Hence he must keep
things in a sanitary condition; it is
just as essential as food.

Now comes the question of food, and
it is a question that puzzles most of
us. The other day I read an advertise-
ment, judging from which, if you did
not buy that particular food, your chick-
ens would never lay another egg. But
do not be worried if you can not afford
to get these things, for bran is an ex-
cellent feed for them, especially so if
one has milk to dampen it with—it is
even better if dampened with water, as
it seems to swell before feeding. I
have used all kinds of food, balanced
rations, and all that sort of stuff, but
prefer bran. Let us be honest with
ourselves, for the successful man knows
better than any one else what his hens
want—therefore the successful man
knows how to feed his fowls. Now,
take the question of milk, that is, clab-
ber. It is one of the very best foods
one can give hens, for one can not af-
ford to lose any food, but conserve it as
closely as the good housewife. He
takes it and makes a mash, and in this
way he gets the most out of it. Now,
a mash, if you understand how to make
it, when it is mixed with the milk, is
the best way to use the clabber, as in
this way they get it all. I have a kind
of food very much like Midland, except
it has more bran and less meat meal, so
I can mix more milk with it. Then as
to grain foods for chickens, their dig-
gestive organs are such that they get
the most out of grain; hence if you
have only grain and green stuff, do not
be afraid to feed it. Of course it is
better to have change and to have milk

(Continued on page 222.)

Your Egg Book

DATE	MAY	JUN	JULY	AUG	SEPT	OCT
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29</						

Dairy Interests

Suggestions for Construction of a Modern Dairy Barn.

FROM THE DAIRY DIVISION, BUREAU OF ANIMAL INDUSTRY, U. S. DEPARTMENT OF AGRICULTURE.

The plan is designed for 24 cows, and allows ample room for calf pen and box stalls for bull and cows; also space for feed-room, hay chute, wash-room, and silo.

In presenting this plan it is not intended to insist that the arrangement shown is the only satisfactory one, but the idea is to present some important features that are often overlooked by the builder and which are vital to a well-planned structure.

The amount of space allowed for the various purposes named on the plan is thought to meet the requirements so far as the square feet of floor space is concerned. The arrangement of the space can be adapted to the needs of the particular location.

SPECIAL FEATURES TO ALL WELL-PLANNED BARNES.

Size.—It will be noted that the width on the plan is 36 feet 4 inches outside. There are two main reasons for adopting this width, first, it allows ample room for the stalls and passageways, and, second, it permits of the most economical use of lumber in building.

While the length here shown is 84 feet 9 inches, this feature is wholly

dependent on the number of cows the dairyman wishes to handle. The side walls are built of stone or concrete up to the window-sills, the balance of the walls being frame. The end walls are constructed of stone or concrete up to the ceiling. A partition extends across the barn, so that the cow stable can be entirely shut off from the other section. This is considered a strong point in this plan.

Posts and joists.—The posts carrying the upper floor are 6 by 6 inches, the girders 10 by 12, and joists 2 by 12. If yellow pine is used, the joists may be spread 24 inches between centers, but if hemlock is used, the distance should be reduced to 16 inches.

Windows.—One of the weakest points in barn construction is the small amount of window space usually allowed. The space in this plan provides approximately 6 square feet for each cow. It will be noted from the elevation that the windows are sliding sash, making them nearly twice as high as they are wide. This arrangement will admit much more light than the same space would if the windows did not extend to the ceiling. A common error is to make the windows too low.

Stalls.—The plan shows a width of stall of 3 feet 6 inches, which is as narrow as should be allowed. This width also fits into the construction better than any other. The depth is indicated as 4 feet 10 inches. This may be varied according to the size of the cows in the herd by increasing the depth of the stalls and decreasing the width of the alley behind, or vice versa. Manure gutter should not be less than 16 inches in width and not over 4 inches deep.

Manger.—The manger is planned to be 2 feet wide and 6 inches deep, with slightly rounding bottom, the bottom being 2 inches higher than the floor of the stalls.

Floor.—The entire floor is concrete 6 inches in depth when finished. We consider concrete the best material for a floor for several reasons: (1) It is the only material that is sanitary; (2) it is economical because of its durability; (3) when a reasonable amount of bedding is used it is comfortable to the

animals and no bad effects result. The floor is intended to be raised about 1 foot above the level of the ground to insure drainage.

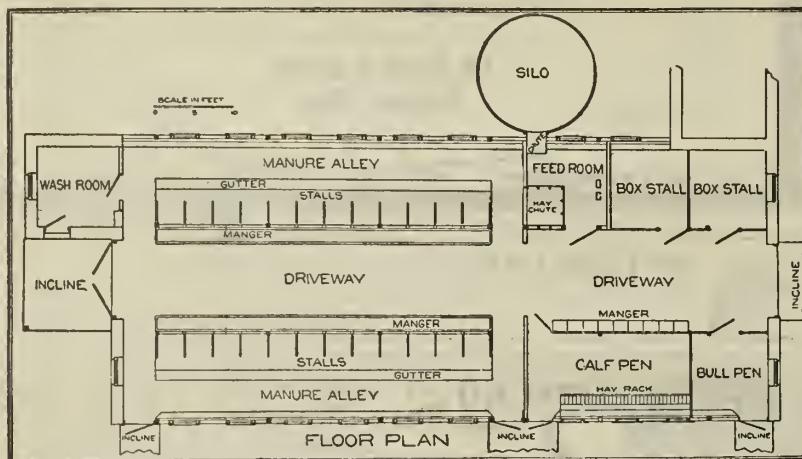
Alleys.—The alleys behind the cows are 4 feet wide; these give ample room for the passage of the manure trucks. It is designed to take the manure not only out of the barn, but away from the barn and deposit it in a manure shed or on the field. It is undesirable from the standpoint of construction to have a manure pit under the stable, for the reason that a concrete floor can not successfully be put on wooden joists, and steel joists are expensive. It is also unsanitary to have the manure cellar under the floor.

Calf pen.—This should be a feature in every well-planned dairy barn. The one shown is 21 by 11 feet, with manger on the front for feeding grain and hay-rack along the back wall. Individual stanchions are provided for feeding calves grain and milk.

Bull pen and box stalls.—These are approximately 10 by 10 feet, which is considered ample size for this purpose. There is a full window in each stall providing an abundance of light.

Feed room.—This is centrally located; a chute from the silo enters into it, also two grain chutes from the upper floor. The feed room is large enough for storage of trucks necessary to carry grain and silage. A hay chute from the loft above deposits the hay in the feeding alley.

Wash room.—No dairy barn is complete without a wash room for the milkers and barn attendants, and lockers for their clothes. It should also



FLOOR PLAN OF MODERN DAIRY BARN.

contain a small boiler for providing hot water and steam, as this is a necessary part of the equipment of a modern barn. Milk scales, record sheets, milk stools, etc., may also be kept here.

Watering.—Watering devices may be put in at the option of the builder and are necessary feature of a modern dairy barn.

Silo.—A silo is provided in the plan at a convenient location for feeding the silage. The silo planned for this barn is 16 feet in diameter and 28 feet high, and has a capacity of about 110 tons. This will provide silage for 24 animals for six to eight months.

GENERAL VIEW OF INTERIOR OF BARN.

The illustrations show the construction of walls, floors, and partitions, also location of doors and arrangement of stalls. The stalls are so designed that



Washed in 1 minute

Count the pieces—notice the difference—and you'll understand why the one who has to do the cleaning prefers the simple Sharples Tubular.

There are other advantages just as much in favor of the Tubular. Write today for catalog V-165—it tells you all about the gain, use, and choice of a separator.

The Sharples Separator Co.
West Chester, Pa.

Toronto, Can.

Chicago, Ill.

Washed in 15 to 30 minutes

A Big Difference

One Minute's Washing as compared to at least fifteen. Wouldn't you like to save at least fourteen minutes twice a day? One minute with a cloth and brush cleans the absolutely simple Sharples Dairy Tubular Cream Separator bowl shown in the upper picture. It takes fifteen minutes to half an hour with a cloth and something to dig out dents, grooves, corners and holes to clean other bowls—one of which is shown in lower picture.



Cream is Cash

AT

The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business.

Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in cash.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

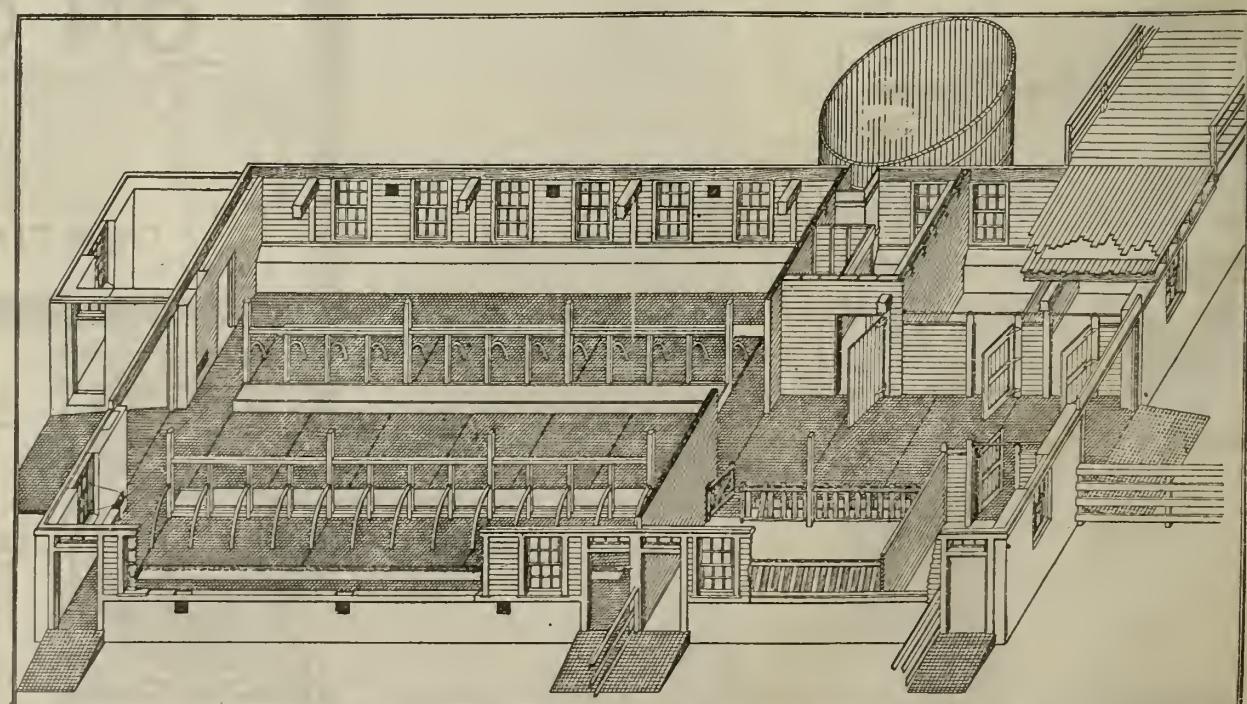
**BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.**

stanchions or chain ties may be used. Builders who desire to use patent stalls will find the arrangement of gutter, platform, and feed manger applicable to their use.

Storage of feed.—There is no objection to storage above the cow-stable

proper, so long as the floor is constructed similar to the one in the drawing; that is, a double floor with paper between, the upper part being made of matched lumber.

Ceiling.—In colder climates it is deemed better to have a comparatively



GENERAL VIEW OF INTERIOR OF BARN.

low ceiling on account of temperature, and this construction admits of changes in this respect.

Ventilation.—The plan adapts itself to any system of ventilation. The openings shown give a suggestion as to where the fresh air may be taken in and the impure air discharged.

Driveway to second floor.—This is located on one side of the barn, at the end. The main reason for locating the driveway at this point is because it does not shut out any light from the floor below. Too often the driveway is placed in the center of the barn, where it covers a large area, which should be left free for windows.

Cost and Profit of Dairying.

[From Hoard's Dairyman—Continued.]

Herd No. 71—Contains 11 native cows.
Yield of milk per cow per year, lbs. 2553
Yield of butter fat per cow per year, lbs. 94
Net returns from the creamery per cow \$19.74
Cost of keeping cow per year 23.00
Net loss on butterfat per cow per year 3.26

The feed was as follows: Pasture—\$6; roughage—mixed hay and fodder corn—\$11; grain—bran—\$6.

The herd was well housed. The owner does not read dairy papers.

Herd No. 72—Contains 13 grade Shorthorn and 2 Holstein cows.
Yield of milk per cow per year, lbs. 4490
Yield of butterfat per cow per year, lbs. 164
Net returns from the creamery per cow 34.44
Cost of keeping cow per year 27.00
Net profit on butterfat per cow per year 7.44

The feed was as follows: Pasture—\$6; roughage—wild hay and corn fodder—\$11; grain—oats and cornmeal and bran—\$10.

The herd was well housed. The owner reads dairy papers.

Herd No. 73—Contains 10 grade Shorthorn and 1 Holstein cow.
Yield of milk per cow per year, lbs. 3121
Yield of butterfat per cow per year, lbs. 106
Net returns from the creamery per cow \$22.26
Cost of keeping cow per year 27.00
Net loss on butterfat per cow per year 4.75

The feed was as follows: Pasture—\$6; roughage—mixed hay and corn fodder—\$11; grain—oats and corn-and-cob-meal and bran—\$10.

This herd was but fairly well housed. The owner does not read dairy papers.

Herd No. 74—Contains 15 grade Shorthorn cows.
Yield of milk per cow per year, lbs. 2854
Yield of butterfat per cow per year, lbs. 112
Net returns from the creamery per cow \$23.52
Cost of keeping cow per year 20.00
Net profit from butterfat per cow per year 3.51

The feed was as follows: Pasture—\$6; roughage—mixed hay and fodder corn—\$11; grain—ear corn—\$3.

This herd was fairly well housed. The owner reads dairy papers.

Herd No. 75—Contains 10 grade Shorthorn cows.
Yield of milk per cow per year, lbs. 1945
Yield of butterfat per cow per year, lbs. 69
Net returns from the creamery per cow \$14.49
Cost of keeping cow per year 25.00
Net loss on butterfat per cow per year 10.51

The feed was as follows: Pasture—\$6; roughage—mixed hay and corn fodder—\$11; grain—ear corn—\$8.

This herd was poorly housed. The owner does not read dairy papers.

Herd No. 76—Contains 6 grade Shorthorn cows.
Yield of milk per cow per year, lbs. 3848
Yield of butterfat per cow per year, lbs. 137
Net returns from the creamery per cow \$28.77
Cost of keeping cow per year 25.00
Net profit from butterfat per cow per year 3.77

The feed was as follows: Pasture—\$6; roughage—mixed hay—\$10; grain—ear corn—\$9.

This herd was well housed. The owner reads dairy papers.

Herd No. 77—Contains 7 grade Shorthorn cows.

Yield of milk per cow per year, lbs.	2490
Yield of butterfat per cow per year, lbs.	92
Net returns from the creamery per cow	\$19.32
Cost of keeping cow per year	20.00
Net loss from butterfat per cow per year	.68

The feed was as follows: Pasture—\$6; roughage—mixed hay and fodder corn—\$14.

This herd was only fairly housed. The owner does not read dairy papers.

Herd No. 78—Contains 11 native cows.
Yield of milk per cow per year, lbs. 5171
Yield of butterfat per cow per year, lbs. 200
Net returns from the creamery per cow \$42.00
Cost of keeping cow per year 29.00
Net profit from butterfat per cow per year 13.00

The feed was as follows: Pasture—\$6; roughage—mixed hay and shredded corn fodder—\$11; grain—oats and cornmeal and bran—\$12.

This herd was well housed. The owner reads dairy papers.

Herd No. 79—Contains 5 high-grade Shorthorn cows.

Yield of milk per cow per year, lbs.	4412
Yield of butterfat per cow per year, lbs.	164
Net returns from the creamery per cow	\$34.44
Cost of keeping cow per year	25.00
Net profit from butterfat per cow per year	9.44

The feed was as follows: Pasture—\$6; roughage—mixed hay and shredded corn—\$12; grain—bran and beets—\$7.

This herd was well housed. The owner reads dairy papers.

Herd No. 80—Contains 7 native cows.
Yield of milk per cow per year, lbs. 8501
Yield of butterfat per cow per year, lbs. 313½
Net returns from the creamery per cow \$65.85
Cost of keeping cow per year 28.00
Net profit from butterfat per cow per year 37.85

The feed was as follows: Pasture—\$6; grain with pasture—\$2; roughage—mixed hay and corn fodder—\$10; grain—oats and barley meal and bran—\$10.

This herd was well housed and kept in barn at all times during winter months. The owner reads dairy papers.

Below may be found the returns per cow for each dollar invested in feed:

No. Herd

71	\$.86
72	1.27
73	.82
74	1.17
75	.58
76	1.15
77	.97
78	1.45
79	1.38
80	2.35

Comparing the best and poorest herds of this group results as follows:

Butterfat	Pro-	
No. 80, milk, lbs., 8501	313½	ceeds,
No. 75, milk, lbs., 1945	69	*10.51

Difference, milk, lbs. 6556 244½ \$48.36

*Loss

Again, comparing the best and the average of all, results as follows:

Butterfat	Pro-	
No. 80, milk, lbs. 8501	313½	ceeds,
All, milk lbs. 3431	126½	2.00

Difference, milk, 5070.. 187 \$35.85

Of this group of herds it may be said that for each dollar invested in feed, four sustained a net loss of 20 cents. The remaining six herds made a net gain of 29½ cents. Of the herds sustaining loss, the owner of but one reads dairy literature. Of the profitable herds the owner of but one does not read dairy papers.

A Davis

Cream Separator direct from factory at factory price, costs half as much as most others. No agents' fees to double price. Investigate our liberal selling plan and the simple three piece bowl machine. Get every drop of cream. Tank 3 feet 7 inches high. Write for money saving catalog No. 126.

Davis Cream Separator Co.
540 North Clinton St., Chicago, Ill.

Cleveland Cream Separator

The Only High Grade Separator Sold at a Reasonable Price.

Easy Running Because:

The Cleveland is the only all ball-bearing separator made. To compare ball-bearings with any other bearings made is like comparing bicycile with a grind-stone.

Durable Because:

The Cleveland has the fewest parts of any separator made in the world. The fewer parts in a separator the less wear—the less repair.

Easy to Clean Because:

The fewest parts and the Cleveland skimming device made of aluminum. We were the first

Direct to You.

to apply this wonderful metal to this use. It is non-corrosive, non-poisonous, has no coating to wear off and milk will not stick to it.

The Selling Plan:

30 days approval test in your own home under your own conditions. You don't need to take our word. Try a Cleveland, the guaranteed perfect skimmer. It won't cost you a cent to be sure. You try one in your own home without putting up one cent in advance. The new free catalog tells you how. Write for it.

The Cleveland Cream Separator Co. Dept. A, 34 Michigan Ave., N. W., Cleveland, O.

GIVE YOUR COWS A SQUARE DEAL

The owner of but three, four or five cows as a rule keeps them simply for the purpose of supplying the home table with milk, cream and butter. He claims it does not pay to keep cows for the dollars and cents they will earn. Why he makes this claim is only because he has never given the cows a "square deal". It is a case of the pot calling the kettle black. The cows are well fed, milked daily and the milk set away in crocks or pans for the cream to rise by natural processes. Here is where the cow receives her bad reputation. From twenty to fifty per cent of the cream never rises and is thrown away with the skimmilk. This twenty to fifty per cent of lost butter represent a snug little sum at the end of the year,—all lost. Just thrown away, and the cow is considered unprofitable. A

DE LAVAL CENTRIFUGAL CREAM SEPARATOR will stop this waste and at the same time produce purer and sweeter cream from which butter can be made that will sell for from five to ten cents more per pound than the gravity skimmed product. In addition the skimmilk is left fresh and warm for the calves. Are not such savings as this worth investigating? Our illustrated catalogue of DE LAVAL machines is sent free upon request. Write for it today and learn the many benefits and advantages to be gained by the use of a DE LAVAL machine.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts., CHICAGO.

General Offices: 109-113 Youville Square MONTREAL

1213 Filbert Street, PHILADELPHIA.

74 CORTLANDT STREET, TORONTO.

9 & 11 Drumm Street, NEW YORK.

SAN FRANCISCO. 14 & 16 Princess Street WINNIPEG.

Take Care

You Can't Afford to Make a Mistake

In Buying a Cream Separator

Of course you want the separator that will give you the best results. Don't make a mistake, then. Investigate before you buy. We claim and ask the chance to prove to you that the

OMEGA CREAM SEPARATOR

is more easily turned; more quickly, easily and thoroughly washed; requires fewer repairs and produces cream of a better quality than any other separator ever made.

Its superiority lies in its construction; it is the only cream separator made whose bowl is supported at both top and bottom—giving absolutely smooth running without vibration; the only separator which delivers both cream and skim milk from the bottom of the bowl; the only bowl which drains itself; the only bowl which can be stopped instantly; the only bowl which does not whip the cream and break the globules of butter fat.

We are so sure that any intelligent man or woman can see the Omega's superiority that we ask the privilege of setting one up for you on your own place. Try it and test it in every way and if you do not find it superior to any other—if it is not perfectly satisfactory to you—to be the sole judge—we will not ask you to keep it. That's a fair offer. Don't you think it will pay you to find out more about this separator for which so much is claimed? Send for catalog, at any rate.

This Book Free to You. New book, "More Milk Money," tells how to care for separator cream; how to make good butter; how to select good dairy cows; how to prevent white specks in butter; how to wash and work butter and a hundred other things you ought to know. Ask for it. Free if you mention this paper, tell how many cows you keep and give address of a neighbor who keeps cows.

The Omega Separator Company.

23 Concord St., Lansing, Mich.

Thick Cream

SELLS FOR ONE CENT MORE PER POUND THAN THIN CREAM

The creameries of the country have become so convinced of the increased value of thick cream over thin cream that many of them are paying one cent per pound more for cream testing 80 per cent. and over than for that testing under 80 per cent.

The reasons for this are—

First—Thick cream makes better butter because it contains less milk and therefore keeps in better condition.

Second—Thick cream is so much less in quantity that the cost of transportation is less.

It is much better for the dairyman to make thick cream because he has more skimmed milk left at home to feed calves—it then follows that dairymen should buy only such separators as can separate thick cream.

The U. S. Separators

Lend the World in this particular

Beware of the cheap and poorly constructed Separators that cannot make thick cream. They would be expensive even if furnished without cost.

VERMONT FARM MACHINE CO., Bellows Falls, Vermont. 18 centrally located distributing warehouses throughout the U.S. and Canada.

A Farmers' Institute Talk on Commercial Poultry Culture.
(Continued from page 229.)

for them, but if you have not, remember they will do well on this sort of a diet.

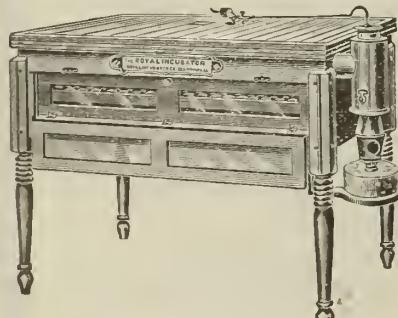
The successful man knows diseases and their symptoms, and being so much with his birds, is sure to detect the first sign of trouble. Should "Biddy" take the roup, he knows it, and immediately separates her from the remainder; the same of cholera, liver complaint, etc. In treatment, he knows what to do. Sometimes in roup they may last over twenty-four hours, or if they have the roup with the dyspeptic touch, they die at once. Sometimes it is the very choicest bird, probably it is one for which he paid \$10 or \$15; but whichever it is, he knows the only thing to do is just to take it out and kill it, and then watch out for others. If he is up against it, he does not get discouraged, but takes into consideration that bad luck may come to all of us at some time. Remember that after a full meal, the Indian girds up his belt and starts out after a deer. If he goes all day without finding a deer, he then girds his belt a little tighter and runs on, it may be several days before he stalks one, but he does not give up, only girds his belt a little tighter and keeps on until he does find one. So it is with the man who succeeds in any business—if disappointments overtake him, he just takes a hook in his belt and goes on. This reminds me of a man who once told me, "You are not in it"—and went up in an alfalfa place and opened a plant. He hatched out some fine birds and lost none of them. This gave him room to boast "That he would show people how to do business in the right way." Then he hatched out more, but lost every one of them. After this he said bad luck had struck him and he soon sold out and went to teaching school. No system, just a haphazard way of doing business.

The practical breeder knows what it costs to produce an egg, he has a record of all his pens, number of hens in each, how each is doing, how old each hen is, knows the ones that lay and the ones that do not. If he has a pen that is not laying, he watches and takes out those that do not lay and puts them in the fattening pen. If it were not for the record, how could he tell which were laying? Another thing, he always feeds at the same hour; if not, the birds will be treading on one another; he uses a certain measure and feeds the same amount; if they are indifferently anxious, he gives them about what they will eat clean.—W. C. Stevens, in Live Stock Tribune.

The Royal Incubator at \$12.75.

These are days of low prices among incubator people, but a machine that seems to go just a little beyond anything else in the way of a bargain is this 230-egg No. 3 Royal at \$12.75.

It is a double walled, self-regulating machine with all the appliances and devices, in finest working order, of the very highest-priced machines. Its weight is 140 pounds, and we have the



word of the manufacturing company that they really consider that in selling this 230-egg Royal at \$12.75, they are offering "the best incubator proposition that has ever been made by any incubator company in existence."

The Royal has been one of the most popular incubators before the public for years. It enjoys the enviable reputation among poultrymen of being the one really high-class incubator that has always sold at a popular price.

If you want an incubator bargain you can not do better than get in touch at once with the Royal Incubator Company, Drawer 66, Des Moines, Iowa. They will send you their catalogue free. Enclose ten cents with your request and they will send you their valuable little book on "Proper Care and Feeding of Chicks, Ducks, and Turkeys."

An Opportunity for Beginners.

There are many families who have considered the incubator hatching of chickens, but who have never made a start in that direction on account of the expense involved in purchasing an outfit. Not knowing just how successful they would be, they have desired to be very conservative in the outlay for hatching machinery. The Geo. Ertel Co. of Quincy, Ill., gave this desire careful attention last summer, and decided that they could afford to make a very close price on a small machine, which would do good work and which would serve to introduce their goods to users, who, making a success of the

small machine, would certainly want a larger one in time. By careful figuring on the manufacture of such a machine in large quantities, they decided that they could get the price down to \$7.90 for the incubator delivered anywhere east of the Rocky Mountains, and that it would be possible to include the brooder for a delivered price of \$11.50. On account of the high freight rates, the prices to points west of the Rocky Mountains have to be a little higher. They have thousands of these machines all crated and ready to ship, and those who have seen them say they are an up-to-date machine which will certainly do good work. This machine is made in one size, 100-egg capacity, and is an improved form of the Hatching Wonder which they have sold for a number of years, and with which, doubtless, many readers of the KANSAS FARMER made their start in chicken-raising.

How Long Should an Incubator Last?

Neither the case, the doors, the inside packing nor any of the structural parts of an incubator are subject to appreciable wear. Yet we find that many a man has laid aside his incubator, calling it "worn out." It seems a pity that so many good machines should thus be discredited, when a remedy is so close at hand, applicable to every machine, no matter of what make.

The great trouble with most of the above incubators is that the vital parts—regulator, thermostat, lamp and heating system, do their part for only a short period. They are often flimsy, cheap substitutes for the real parts they represent.

The faulty parts can be readily replaced by the reliable, durable "Acme" goods made by the H. M. Sheer Company, Quincy, Ill.

The Acme Wafer Thermostat is the only perfect thermostat on the market; has stood the test of time and usage. Their patented valve and filler is the keynote to its wonderful efficiency. All of their regulators are equipped with this wafer, making them sensitive to a fraction of a degree, controlling the temperature automatically, and requiring but one adjustment. Their action being almost human.

Their new catalogue just from the hands of the printers, gives full description, prices, etc., of their large and complete line of supplies. It also contains the complete illustrated plans, enabling any one to build the Famous Peerless Incubators and Brooders; so clearly described and illustrated a boy of 10 years old can follow them. They are free, together with their catalogue. Send for them to-day. They are worth \$2 to any one interested in artificial incubation. Address, H. M. Sheer Co., Quincy, Ill.

"A Sturdy, Yellow Puff-Ball—His Mother Was a Hatch-All."

That is the legend on the title page of a newly written, 80-page incubator catalogue just off the press. A fluffy, happy chick, backed up by two of his brothers makes an appropriate illustration for the "Hatch-All" Incubator catalogue. Inside, the whole eighty pages are interesting, instructive, profitable to every poultry-raiser. There are over sixty half-tone illustrations reflecting nearly every phase of the poultry industry. The double half-tone (pages 36 and 37) illustrating "How I made money on a town lot" shows a thrifty flock of white Wyan-dottes in their own surroundings. They are a lot of beauties. The article is written by Mrs. Wagner, a Nebraskan. Every poultry-lover ought to send for this book if merely to own this handsome, double-page illustration. There are a score of valuable, money-making features about this catalogue. It explains in full the value of the "Hatch-All" incubators and brooders, their heating systems, ventilation, regulators, lamps, etc. These are fully illustrated in half tone. It explains how the Hebron Incubator Co. send their machines, freight prepaid, saving buyers trouble, annoyance, expense. An extended article details the proper methods of running an incubator, how to avoid mistakes and loss through lack of experience. Space is too limited here to tell all about this well-written piece of incubator literature. I urge every reader and keeper of poultry to send to the Hebron Incubator Company, Hebron, Nebraska, for this book.

ONE WHO HAS READ IT.

A Good Little Poultry Book.

We take pleasure in directing the attention of our readers to a little book before us, entitled "Proper Care and Feeding of Chickens, Ducks, Geese and Turkeys." It is published by the Des Moines Incubator Company, Des Moines, Iowa, and is sold for 10 cents a copy. No reader will begrudge the small price to get the accurate, specific information which this little book contains. It is in neat, compact form, and gives directions and pointers in a way that they will be applied every day by the poultry-raiser. The different classes of fowls are treated separately. Particular attention is given to right starting, the foods that are adapted and those not adapted to the new-born fledglings. It is an especially valuable book for beginners. Old poultry raisers will get many valuable suggestions from it. A copy may be procured by sending 10 cents direct to the publishers.

In a new catalogue the Manson Campbell Co., Detroit, Mich., explains its claim to be able to produce the best possible incubators and brooders at less cost than is possible in any other factory. This catalogue is a beauty, is filled with useful information, and can be had for the asking. Mention KANSAS FARMER.

Racine, Wis., is a great place for the manufacture of agricultural machinery. Among the appliances made none is more in demand than the Bell City incubators and brooders. Send to the Bell City Incubator Co., Racine, Wis., and get a copy of "Hatching Facts;" it will give you information and entertainment on the production of the "helpful hen."

**TALK
ABOUT
YOUR
HAM**

You never tasted meat so sweet and well kept as ham smoked in the new way with Wright's Condensed Smoke. If you have ham, bacon or any kind of meat to cure

WRIGHT'S CONDENSED SMOKE

will cure it perfectly without loss of time or meat. Easy, certain, safe, healthful. Bottle smokes 280 lbs. At druggists 75 cents. Fully guaranteed. Write for "The New Way." Tells ALL about it. The E. H. Wright Co., Ltd., 112 W. 4th St., Kansas City, Missouri

**PIONEER GUARANTEED
NURSERY STOCK
AT WHOLESALE PRICES.**

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.



LIGHTNING PORTABLE WAGON AND STOCK SCALE

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company.
129 Mill Street, Kansas City, Missouri.

The German Nurseries.

To purchasers of seeds, plans and trees the name of Carl Sonderegger and the German Nurseries is not new, but it is nevertheless not out of place to call attention to the fact that as usual Mr. Sonderegger is prepared to supply the very best in quality on his usual reasonable terms. Anything that is required in the way of apples, plums, cherries, peaches, grapes, etc., will be supplied by the German Nurseries in any quantity and the purchaser can rest assured that it will be of the satisfactory kind. For the convenience of his patrons Mr. Sonderegger issues two editions of his catalogue—one in English and the other in German. The catalogue lists a great many good things for the agriculturist and includes not only fruit-trees and small fruits but forest-tree seedlings and hundreds of choice varieties of tested seeds. Be sure and send for one of these catalogues before ordering your supply of seeds for this season's planting. Address The German Nurseries, Carl Sonderegger, Proprietor, Beatrice, Nebraska, mentioning this paper.

Coated Roofings.

Roofs generally need painting four times to one time that the rest of the building does.

Most of the Ready Roofings on the market require a coating every year or so with a special kind of paint.

Amatite, however, is a big exception to the rule. This roofing has a well-earned popularity because it never requires painting or coating. Just lay it—that's all. After that Amatite takes care of itself, needing no attention. The mineral surface is better than any paint could be.

It will be found well worth while to send for a free sample which may be had without charge by addressing the Barrett Manufacturing Company, New York, Chicago, Cleveland, Boston, Allegheny, St. Louis, Minneapolis, Philadelphia, New Orleans, Kansas City.

At the various State fairs visited by the KANSAS FARMER representatives, it was particularly noticeable that the Gee Whizz Washing Machine, manufactured at Des Moines, Ia., and now advertised in the KANSAS FARMER, was a good seller, and it was evident that it was the most popular machine on the market. We trust our readers who are interested in securing a first-class washing machine will write these people for full information about the Gee Whizz Washing Machine and mention the KANSAS FARMER.

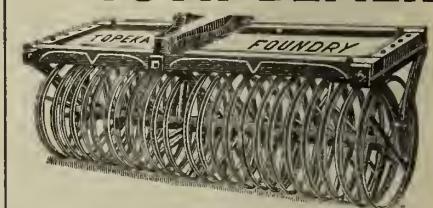
The American Galloway Herd Book, Vol. XV., is out. Its 507 pages contain an elaborate record of 1999 purchased animals numbered from 25001 to 27000, a copy of charter, constitution and by-laws of the association and a list of active members; also an index to breeders, importers, and owners of these animals. It is published at Cedar Rapids, Ia.

We call special attention to the seed advertisement of M. G. Blackman, Hoxie, Kansas, who is advertising the Great American Desert Seeds. His specialty for 1906 includes alfalfa, Kafir-corn, cane, millett, Russian Prosso, spelt, etc. Write him for catalogue and he will explain why "the desert shall rejoice and blossom as the rose."

On page 225 of this issue, we call your attention to an original ad by Frank C. Clark, one of California's largest farmers that should appeal to the reader. He has won out in farming by practicing up-to-date Middle-western methods in his own State, using his own term, an old California phrase. "By staying with the '49 and spring of '50 ways."

Among the attractive catalogues of the season that of B. F. Smith the small-fruit man of Lawrence, Kansas, is especially neat. Mr. Smith has been known as the "berry king." His extended experience in small fruits in Kansas has enabled him to concentrate his efforts on the varieties that are most profitable for either the home, garden or the commercial plantation.

DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

Neosho Poultry Yards

Rose Comb R. I. Reds exclusively. Two first, one second and one third prizes at the Emporia, Dec. 1905, Show. One pen of fine red pullets and hens mated to a red male for producing red pullet eggs from this yard. \$2.00 per 15, others at \$1.50. J. W. Swartz, Americus, Kansas.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio

Send your orders quick.



KIND FARMERS
Many of you need a Berry Patch

My 1906 Catalogue will tell you how to start it. Also, the price of plants, roses and other ornaments for the yard.

B. F. SMITH, Drawer C, Lawrence, Kans.

13 WEEKS FREE

Or 15 months for only \$1

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the west. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

**KANSAS FARMER COMPANY,
Topeka, Kansas.**

I accept your trial offer to new subscribers to send me the Kansas Farmer three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O. Address.....

A "Peaches and Cream" Stallion.

Our illustration is from the "home of the winners," of Frank Iams, St. Paul, Neb. The largest individual owner and importer of black Percherons, Belgians, and Coach stallions in the United States. He imports stallions by special express train load, spends four months in Europe, selects and buys every stallion himself, direct from the best breeders. He knows the country, and how to buy "top notchers" worth "the coin." He uses his own money, owns his farms, horses and barn, has no two to ten men as partners. He saves you all commissions and middlemen's profits as he sells all his stallions at his home barns himself, and sells more stallions than any ten men in the United States. He is saving thousands of dollars to stockmen by selling "peaches and cream" stallions at \$1,000 to \$1,500. He guarantees them better than stallions sold to farmers' stock companies at \$2,500 to \$5,000 each. If you do not find this true, on a visit to his importing establishment, he will cheerfully pay you \$100 for trouble, you the judge. Iams speaks the languages; this alone saves him 20 per cent on his stallions. He is not in the great stallion trust; this saves you 25 per cent. He places \$1,000 insurance in reliable company at six per cent. His successful business of 24 years makes him a safe man to do business with. He gives every bank in his town as reference. "It's up to you;" why will you pay \$3,000 for a \$1,200 to \$1,500 stallion? Iams has "the goods" just as you read about. This cut is true to life and is "Iams' Espoir-Dragne (21653). Royal Belgian—5 years old; weight 2,140 pounds. He is a massive, big-boned drafter of smooth form, an up-to-date stallion that you are looking for; one that turns the heads of all the boys. He is a "peaches and cream" "black boy" with the "Iams" brand on him. That alone stamps him as a "top-notcher." Iams has 120 models of this type, that he is selling at \$1,000 and \$1,500, and all must be sold. Don't wait, write Iams for that "hummer" of a horse catalogue. It's the richest on earth. It will save you \$1,000 or \$1,500 and tell you where and how to buy a "top notcher." Don't take any "con salesmen's" word, visit Iams. His barns are filled to the roof with 1,600 to 2,600-pound stallions.

Tested Seeds.

This is the day when people want to know things. It is not enough to simply make an assertion, you must produce the proof for most of us are from Missouri, and have to "be shown." Especially is this true of the farmer with his seed. He has been reading how corn is bred and tested and sorted, and he thoroughly believes in that sort of thing. He knows that that is the only way he is ever going to get seed that will make his acres earn him the profit they should. Slip-shop ways of farming and haphazard seed might have answered the purpose a few years ago, but land is getting to be too valuable to admit of even pretty good farming. It must be good farming and tested seed must be planted if the farm is to yield him proper returns for the hard work of tilling the soil and harvesting the crop.

Same way with the garden. The seed counts a whole lot for the success or failure of the garden, as well as the farm, and the man who raises the seed you plant can help or hinder you. He should know that the seed he sells you is better this year than the seed he sold last. But most seedmen don't know that.

That method does not suit the wide-awake farmer and gardener of to-day. He has been studying along the lines of improvement, and he wants to know that the man who grows his seed knows how to test it, and how to grow better seed every year.



HENRY FIELD TESTING SEEDS.

In the accompanying illustration we show how Henry Field, an expert gardener and seed-grower of Shenandoah, Iowa, tests his seed in an incubator. He says, "I have struck a good plan for getting uniform warmth and moisture when I am testing seeds. I put the boxes with the seeds in into the egg-chamber, set the regulator for about 70 degrees, and have spring weather made to order. The conditions are the same as spring out of doors, and the seeds sprout nicely if they are good grade."

Mr. Field is meeting with remarkable success, as a seedman, because he is a practical gardener and is making a scientific study of seed-growing. He applies the knowledge thus gained to the improvement of the seed he grows. He was the first man in the West to sell seed-corn in the ear, and also the first to sell shelled, graded and tested seed-corn, guaranteed "your money's worth or your money back."

Write to him for any information you desire about seed or any phase of gardening, he will gladly answer any questions that will help you to make your garden or farm work more pleasant and profitable to you.

The KANSAS FARMER has just had the pleasure of sampling a specimen each of Black Ben, Senator, and Delicious, apples sent by Stark Bros., of Louisiana, Mo. The Black Ben was as big as ever, well colored, firm, crisp, and looked capable of keeping until midsummer. The Senator was of nice size, shape, and color, and possessed a splendorous skin of its own. It had been kept long enough as was shown by discoloration of its flesh

on one side. The Delicious was in exactly the right condition for eating. It was a large apple, well-colored, juicy and melting, delicately flavored, an apple among a thousand.

Wichita Nursery.

There has been a great increase of interest in tree-planting and fruit-growing in Kansas, Missouri and the Southwest in the past few years. This is a good thing for these regions, and gives promise of much more prosperous times for the farmer who uses such foresight as to plant plenty of fruit and bush fruits.

W. F. Schell, proprietor of the Wichita Nursery, who was elected vice president of the Kansas State Horticultural Society last winter, has done much to increase the interest taken in fruit-growing throughout all these regions. He was the Kansas Commissioner of Horticulture at the World's Fair, and won the gold medal for the installation and display of the Kansas exhibit. He also received a gold medal from President Francis for merit in keeping up the exhibit during the seven months in so attractive a manner.

Mr. Schell states that the Southwest is an ideal place for the growing of tree- and bush-fruits of all kinds, but that stock should be selected that is especially adapted to the soils and climate of these States.

The Wichita Nurseries, Wichita, Kansas, are ideally located for supplying the right kind of trees, bushes, vines, etc., of every variety for these localities. They have direct connections with all points and sell at wholesale prices. All their stock is true to name and they are perfectly reliable people to deal with.

Mr. Schell gives all orders his personal attention, which means much to the purchaser, for the majority of nurseries leave the filling of orders to help who are often careless in their work and many times incompetent to select the right stock. Patrons of the Wichita Nursery receive the benefit of Mr. Schell's wide experience and knowledge of horticulture, as he cheerfully gives them any information they wish on this subject. They have just printed a beautiful new catalogue which contains much interesting and valuable matter. We advise all our readers who are interested in fruit-growing to write them for a copy. They will gladly send it free. Just address Wichita Nursery, Wichita, Kansas.

An Evergreen Specialist.

D. Hill, of Dundee, Ill., has long been known as an evergreen specialist, and a visit to his nurseries establishes his right to the title beyond question. For years Mr. Hill has made the study of evergreen culture a specialty with the result that within the confines of his ample grounds are to be found specimens of almost every variety of evergreens. Of those kinds which are in more general demand his stock numbers into the millions, while the most perfect specimens of the less hardy and rarer varieties are also to be found there. Many of these trees are natives of our own country and cover the slopes of the mountain ranges in their respective localities with vast forests of pine, spruce and cedar. There are others which have been imported from foreign countries, some coming from Russia, Switzerland, Japan, Australia, and other far distant climes. Mr. Hill has given the subject of transplanting and transporting these trees especial attention and his method of digging and packing is such that there is seldom any loss caused by the operation, and the trees thrive and do well in their new locations even though they may have to travel many hundreds of miles before being placed where they are to remain permanently. While the Dundee Nurseries are particularly noted for the fine quality of their evergreens they also include deciduous trees, shrubs and other plants usually found in a well-stocked nursery. They are prepared to supply orders for almost anything in this line. Any one contemplating the planting of either evergreens or the other species will do well to secure a copy of Mr. Hill's catalogue. This book is but recently from the press and is beautifully illustrated and contains full information of value to any one in need of nursery stock. It will be sent free on request. Address Mr. D. Hill, Dundee Nurseries, Dundee, Ill., mentioning the KANSAS FARMER.

Cures Bone Spavin of 7 Years' Standing.

Wilton, Jct. Ia., Jan. 7, 1905.

Dr. B. J. Kendall Co., Gentlemen:—I have used your Spavin Cure and find it a great remedy. I have used it on a horse that had a bone spavin for seven years and after using two bottles of your Spavin Cure find it as sound as a dollar—a complete cure. You can use this testimony if you so desire.

Yours truly,
JULIUS GRODERT.

The Grain Belt Realty Company, Concordia, Kans., owner of 60,000 acres of fine farming lands, invites persons wanting farms on the great wheat, corn, and alfalfa lands of Central and Western Kansas to buy directly from the owner, thus saving commissions. The rapidity with which Kansas lands are going into new hands admonishes those wanting farms to move quickly. Write to the above-named company for detailed information of the bargains offered.

Are there farms in Kansas that pay 25 to 50 per cent? Such have been reported. The advertisement of Thos. D. Hubbard, Kimball, Kans., in this issue, tells about them. Write to Mr. Hubbard for particulars.

Has Not Lost Any Hogs Since He got Sloan's Liniment.

Dr. Earl S. Sloan, Boston, Mass.

Dear Sir:—My hogs had hog cholera three days before we got your liniment which was recommended to me by a neighbor who was using it with success. I have used it now for three days and my hogs are almost well. One hog died before I got the liniment, but I have not lost any since.

A. J. McCARTHY, Idaville, Ind.

GREAT COMBINATION SALE!

60 Thoroughbred Hereford, Shorthorn and Angus Cattle; Duroc-Jersey, Poland-China and Berkshire Hogs

ELK CITY, KAN., SATURDAY, MARCH 17, 1906

BREEDERS REPRESENTED

Hereford Cattle—Raman Yole, Elk City; L. L. Swinny, Lafontaine; Samuel Drybread, Elk City; Cripps, Elk City; Dunham & Logan, Lafontaine.

Angus Cattle—G. G. Coleman, Elk City.

Duroc-Jersey Hogs—W. O. Stephenson, Elk City; G. H. Coleman, Independence; Samuel Drybread, Elk City.

Poland-China Hogs—J. A. McDowell, Elk City; L. L. Swinny, Lafontaine; R. J. Conway, Elk City.

Berkshire Hogs—H. H. Miller & Son, Elk City; D. O. Cripps, Elk City.

TERMS OF SALE.—Cash or bankable note for six months, drawing 10 per cent interest.

No postponement on account of weather.

Sale held under cover, rain or shine.
For Catalogue apply to SAMUEL DRYBREAD, Manager, Elk City, Kans.

St. Joseph Stock Yards Co.

South St. Joseph, Missouri

A Short Story to the Point—Ship Your Live Stock to St. Joseph and return home well pleased.

Jno. Donavan L. D. W. VanVleet M. B. Irwin

Vice-President and General Manager Assistant General Manager Traffic Manager

PUBLIC SALE

Jacks, Jennets and Mules

Second Annual to be held in

Savannah, Missouri, March, 8, 1906

22 large Black Jacks with white points, the kind that has built my annual breeding trade to over 600 mares and jennets at one barn and that has made Missouri famous as a mule State. As a class they possess the essential points for good breeders, size, heavy bone, good width, length, heads, ears, style, substance, and of the best breeding known. Four large Black Jennets in foal of same character. 22 extra good coming 3-year-old mules, the good boned, wide out kind. Some of them will mature in mules to weigh 1400 to 1500 pounds; and 4 good young harness horses. Write for illustrated catalog.

G. M. SCOTT, Route 2, Rea, Missouri.

Among Our Seedsmen.

Commencing with this issue, our readers will notice the advertisement of the Hart Pioneer Nurseries of Fort Scott, Kans., advertising high-grade nursery stock. This is an old established firm, having organized their business in a small way in 1865, until at the present time their nurseries comprise over 600 acres and are among the largest in the West.

They make a specialty of the mail-order business, and sell their stock direct to the planter at wholesale prices, which saves the consumer all agent's commission.

They advertise their stock to be strictly first-class, pure-bred in every respect and guaranteed true to name.

All of our readers who contemplate planting nursery stock of any kind this spring, will do well to drop a card to the above firm, asking for their wholesale catalogue. And you will do us a favor if you will kindly mention the name of this paper in writing to them.

One of the most interesting catalogues of grape-vines and small fruits is that of Geo. S. Josselyn, Fredonia, N. Y. At the World's Fair, St. Louis, Mr. Josselyn was awarded the only gold medal to any individual or firm for out-of-door grown grapes. About 90 per cent of his exhibit was Campbell's Early, a grape reputed to be of the highest quality, to begin ripening with Moore's Early and to improve for two to six weeks, making it a very early, a medium, and a very late grape. It is also claimed that it bears about three times as much fruit as any other variety. Write for Mr. Josselyn's catalogue, mentioning the KANSAS FARMER.

The advantage of planting perfect seed is but just beginning to be recognized. The genius of the inventor is therefore turned to the production of a seed grader that will separate the perfect from the imperfect, the large from the small, the heavy from the light. The Chatham Fanning Mill, made by the Manson Campbell Co., Detroit, Mich., is a machine that has been designed to meet the demand for a perfect grader. Get a catalogue and learn the merits of clean, pure seed and of the way to make sure of it.

Attention is called to the advertisement of nursery stock, trees, and small fruits in this issue, by John F. Dayton, of Waukon, Iowa, who is well known to our readers as having been for twenty-six years engaged in selling directly to the planter. He offers 400 strawberry plants for one dollar, and other stock at low prices. Write him for free catalogue.

The seed catalogue of Funk Bros., Bloomington, Ill., gives some exceeding-

ly valuable suggestions on breeding corn. These farmers of 25,000 acres were among the first to take up scientific breeding of plants in a large way. Their catalogue is mailed free on application. It should be in the hands of every grower of corn.

The Zimmerman Seed Co. of Topeka, Kans., is one of the vigorous and growing institutions of the State that does things. Get a 1906 catalogue of this company and select from it. Not one of the people who have had dealings with this firm has ever complained to the KANSAS FARMER.

A California trip is made doubly pleasant if it includes a daylight ride over the Rockies. This is the way of the Colorado Midland. Colonists' rates in effect daily February 15th to April 7th. For full information write Morell Law, traveling passenger agent, 566 Sheldley bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

The KANSAS FARMER is in receipt of Vol. XX, Standard Poland-China Record, published at Maryville, Nodaway County, Mo. It is neatly indexed and contains record of pedigree boars from No. 35080 to 37282; and of sows from No. 83310 to 88666.

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railway. This engraving is 26 by 10 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheldley bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

Wichita
O give me a haystack, a hen and a chickon,
A healthy young farmer with bright-colored vest,
A good horse, feed of corn the pigs to fatten,
And hero's to you a tale of the West.

O give me a bachelor, sonr, nasal, lanky,
With hand that is mortgaged a house fallen down;
A pedigree lengthy, a school-teaching yankee,
And here's to a tale of a New England town.

Lucrota E. Lovett.—

Like our shadows, our wishes lengthen as our sun declines.—Young.

Berry's Golden Rule Poultry Farm,
Clarinda, Iowa.

This is the first season for this farm. It has assumed the poultry business recently conducted by Mrs. Berry in connection with the A. A. Berry Seed Co. It has been a breeder of pure-bred poultry for a number of years, and heretofore has made Plymouth Rocks its specialty.

Under the new management this company is offering stock and eggs from eighteen of the leading varieties of poultry. It also manufactures and sells the new "Biddy" Incubators and brooders; a machine with some new features that are both labor- and money-savers. This company also carries a full line of poultry supplies.

Orders for anything in the poultry line will receive prompt and careful attention, and be filled to the entire satisfaction of the customer. We strongly advise all those who are interested in poultry and incubators to write for this firm's valuable book, "Profitable Poultry," which will be sent upon receipt of 3 cents in stamps to pay postage. See the ad on page 229. It will pay you to read it. Address Berry's Golden Rule Poultry Farm, Clarinda, Iowa.

THE MARKETS.**Kansas City Live Stock Market.**

Stock Yards, Kansas City, Mo.

Monday, February 26, 1906.

The heavy marketing of cattle continues to be the feature, 43,200 last week, a small decrease from the week before, but 17,000 more than same week last year. Buyers tried to break the market the first of the week, but had no success whatever, and each day's trade closed up firm, until Thursday. The week finally closed 10@15c lower on nearly all classes, but lower prices only applied to what few cattle came in Friday and Saturday, a small proportion of the total receipts for the week. It is beginning to be doubtful whether there will be much more of an advance this spring. May corn has been selling 5c lower than a year ago, which fact, together with the fact that feeders have made money on the stuff already marketed, has had a tendency to put large numbers of cattle on feed for the spring market.

The cattle supply to-day is 10,000 head, and as other markets are lightly supplied, market is strong to 10c higher. Buyers have been favoring the light-weight beef steers, and choice heifers for the last two or three weeks, although, of course, prime heavy steers still bring top prices. The best price was \$5.80 last week, top to-day \$5.50, bulk of beef steers \$4.75@5.40. Choice heifers sold at \$5. top cows \$4.50, bulk of heifers \$3.75@4.50, cows \$3@4. bulls \$2.65@4. veals a shade lower, \$6@7.25. Stockers and feeders were at a point almost out of reach first of last week, and had to come down 15@20c before the close of the week to stimulate much trade. They are strong to-day. Feeders sell at \$4@4.75, stockers \$3.35@4.60. A string of 669 head of panhandle stockers, 682 pounds, sold straight at \$3.90 on Wednesday, and some high-grade Colorado stockers at \$4.60 Thursday.

Hogs sold Saturday at the highest point this year, but weakness was evident at the finish. The market is somewhat nervous, subject to fluctuations, and some traders believe it has reached the limit. Supply was heavier last week, at 61,000 head, run to-day 6,000, market 10c lower, top \$6.12½, bulk of sales \$5.95@6.10. light hogs \$5.90@6.05 mainly. pigs around \$5.50.

Lambs declined 15@25c again last week, sheep held steady. The quality of lambs is also inferior, and feeders either overlook the great benefit to be derived from the last twenty or thirty days feeding, often 30 to 50 cents per hundred, or they fear the future market. Supply to-day is 8,000, sheep strong, lambs weak. Some lambs sold at \$6.75 Friday, bulk of lambs to-day \$6.10@6.40, yearlings \$5.75@6.10, 112-pound Western wethers at \$5.80, 112-pound Western ewes at \$5.35, medium to common ewes \$4.25@4.75.

J. A. RICKART.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., Feb. 26, 1906.

The trade in cattle to-day showed little change from the close of last week. Good, light, and medium-weight steers sold with a little strength, while others held about steady, although there was some dullness on the fairly good, medium, plain, heavy styles, selling around \$4.85@5. The market on cows and heifers was steady to strong, and veals and bulls indicated no especial change. The market on stock and feeding steers was the dullest in many weeks, as the snow still prevailing curtailed demand both on country account and regular dealer account. Good kinds were around 10c lower while the common to fair qualities were 10@15c lower, and in extreme cases more. Following are current quotations: Native steers, \$4@6; Texas and Westerns, \$3.75@5.35; bulls and stags, \$1.90@4.65; veals, \$3.50@7.75; yearlings and calves, \$2.75@3.80; stockers and feeders, \$3.15@4.50.

Owing to supplies of hogs at the five points showing a gain of 11,000 hogs over the number in sight on last Monday, and the further fact that three-fourths of the supplies were centered in Chicago, the market to-day broke very sharply, prices being generally 5@10c lower, with more selling 7½@10c lower than any other way. Prices ranged from \$5.90@6.12½, with the bulk selling at \$5.97½@6.07½. The country should still bear in mind that the upward course of values is very unsatisfactory to the packers and that they will take advantage of increased receipts to break the market, therefore advances should not be followed very closely. Demand here continues very strong, and while receipts are comparatively large, more could be sold to good advantage, as prices are well maintained with other points.

The trade in sheep to-day was about steady, but lambs were weak to 10c lower.

WARRICK.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas**SUBSCRIPTION PRICE: \$1.00 A YEAR**

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run if the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., - Topeka, Kans.**Special Want Column**

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

MILK COWS FOR SALE—By V. B. Howey, Route 1, Topeka, Kansas.

FOR SALE—A herd of registered Red Polled cattle at a bargain. I. Sandusky, Route 9, Wichita, Kan.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th; also car high grade yearling bulls. Duff & Sons, Horton, Kansas.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FIVE REGISTERED HEREFORD BULLS for sale. All good individuals. Eight months, 9 months, 1 year, 20 months, and 4 years are their respective ages. Cooper Monroe, Lyons, Kans., R. F. D. 5.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans., R. R. 2.

FOR SALE—The great show and breeding bull, 198 Duke of Wildwood 148143, that took 4th place at the Kansas City Royal in 1904; also 20 cows and heifers all choice individuals, some show stuff. Geo. Manville, Fawcette, Mo.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address, C. A. Kline, R. F. D., Tecumseh, Kans.

FOR SALE—Hereford bulls, choice and blocky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and helpers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

HOLSTEINS—Bull calves, 3 to 8 months old, one yearling, extra choice. H. B. Cowles, Topeka, Kans.

PEDIGREE SHORTHORN BULL—3 years old; sire Magenta, who cost \$1,100 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and helpers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Vilolet Prince No. 145647. Has been at the head of our herd as long as we can use him. An extra animal. H. W. McAfee, Topeka, Kans. (2 miles west of Kansas Ave. on 6th Street road).

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 Ranch, Bliss, O. T.

FOR SALE—One straight Cruickshank bull, 14 months old, dark red, extra good animal. H. W. McAfee, Topeka, Kans.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Blvd., Kansas City, Mo.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires. A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (Imported) grandam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for 2 years. Her 4 dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kans.

SWINE.

FOR SALE—25 Duroc-Jersey boars, large enough for service and 60 gilts, open or bred. Pigs strong boned and best of color. Prices low. A. G. Dorr, Route 5, Osage City, Kans.

FOR SALE—Bred O. I. C. gilts and some good hogs. All good stock. A. W. Thoes, Inman, Kans.

FOR SALE—20 good, strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

FORTY HEAD of pedigree Duroc fall pigs; good color, well built. Write to Chas. Dorr, Route 6, Osage City, Kans.

HORSES AND MULES.

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,800 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

HORSES AND MULES.

AN IMPORTED registered Percheron stallion, No. (4359) 24512, 8 years old, sound, color black. First class horse in every respect. Call or write J. H. French, 718 Kansas Ave., Topeka, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 heads of Jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE CHEAP—One gray registered Percheron stallion. Sound and all right. A. W. Thoes, Inman, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 830 Highland Ave., Topeka, Kans.

POULTRY.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94½ points. Write for price. A. F. Hutley, Maple Hill, Kansas.

FINE BLACK LANGSHANS started m. \$3.00 eggs. Thirty eggs for 50 cents. Minnie Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—From min. \$1.50, 15 for \$1.00; 100 for \$5.00, from pen, \$2.00, f. 15, 100, 150, Geo. W. King, Route 1, Solomon, Kansas.

SEEDS AND PLANTS.

PURE KHERSON SEED OATS—cleaned and sacked, 50 cents per bushel, f. o. b. Hull. Thos. Williams, Hull, Kansas.

FOR SALE—Kherson Seed Oats, re-cleaned, finest quality, 75c. per bu.; 10 bu. lots, 60 cents. Sacked, f. o. b. Achenbach Bros., Washington, Kansas.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SELECTED SEED CORN, Hildreth's Yellow Dent, grown in Sumner County, \$2 per bu. Send orders to W. A. Shreler, Argonia, Kans.

SMALL FRUIT PLANTS—For price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Sons, Route 9, Lawrence, Kans.

PEDIGRIED SEED-CORN—Raised from Funk Bros.' high-bred Boone County ("Special") White. The seed from which this corn is grown cost me \$5 per bu. It is now acclimated to Kansas. Select ears for sale at \$2 per bu. Address Edwin Taylor, Edwardsburg, Kans.

FRUIT TREES half price, best quality. Catalogue free. Baldwin, Seneca, Kans.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35c; 1,000, \$2.25. Raspberry, 100, 70c; 1,000, \$6. Blackberries, 100, 70c; 1,000, \$5. Grapes, 2 year, 5c. Currents and gooseberries, per 10, 50c. Asparagus, 100, 40c; 1,000, \$2.25. Rhubarb, 10, 30c; 100, \$2.25. Gladiolus bulbs per 10, 10c; 100, 75c. Dahlias, each, 10c; 100, \$5. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Springs Nurseries, Bonner Springs, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes, six kinds. Prices on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety." Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State corn-breeders' contest 1906, won 1st and 2d prize for the most productive acre, 103 and 78½ bushels. Write to C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

ANNOUNCEMENTS.

GEO. A. HURON is a candidate for the office of Probate Judge of Shawnee County, subject to the Republican primaries.

BY WRITTEN REQUEST of many voters of the Thirty-seventh Representative district, I hereby announce my candidacy as representative from Shawnee County, subject to the primaries of March 10, 1906.

A. E. DICKINSON.

I HEREBY announce myself as a candidate for the office of County Treasurer of Shawnee County, subject to the Republican primaries.

G. W. VEALE.

YOUR BALLOT solicited for Register of Deeds at the Republican primaries.

ROOSCOE C. SQUIER.

SUBJECT to the Republican primaries to be held March 10, 1906, I am a candidate for reelection to the Legislature from the Thirty-ninth district, which comprises the Sixth precinct of and additions to the Second ward, all of the Fifth and Sixth wards of Topeka, and all of the country south of the river.

ROBERT STONE.

HELP WANTED.

WANTED—Single man on farm, must be congenial with stock. F. M. Linscott, Farmington, Kans.

MISCELLANEOUS.

"THE LAND," a monthly journal for the homeseker and landowner. 25 cents per year to new subscribers. Address The Land, Cotontwood Falls, Kans.

WANTED—Men to learn barber trade. Don't miss this chance; special offer for limited number. Just opened branch of the well-known Moler System of Colleges, our fourteenth school. All modern facilities. Few weeks completes. Wages paid in finishing dept. Positions waiting our graduates. Catalogue mailed free. Moler Barber College, 6th and Delaware Sts., Kansas City, Mo.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

STRAYED OR STOLEN from my farm, 2 bay horses, weight about 14 or 15 hundred pounds, one with blaze face, glass eyes, feet white; other, one hind foot white, patch of hair off of right jaw. Suitable reward for return. Allen Flesch, Route 1, Garfield, Pawnee County, Kans.

WANTED—At once, sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary. Instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

MISCELLANEOUS.

EARN FROM \$87.50 to as high as \$155.50 per month. Wanted 400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Rail-way Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49

50 BULBS
25 Cents.
Will grow in the
house or out of
doors. Hyacinths,
Tulips, Gladiolus,
Crocus, Fuchsias,
Oxalis, Tuberoses,
Begonia, Jonquils,
Daffodils, Chionodoxa,
Lily, Dewey Lily,
Gloxinia, Lillies of
the Valley—all postpaid, 25c. in stamps
or coin. A \$1 premium with these bulbs we will send
FREE a big collection of flower seeds—over 200 kinds.
HILLSIDE NURSERY, SOMERVILLE, MASS.

SEED CORN
R IT ALWAYS PAYS to plant the
best: Ratekin's "Pride of Nashua",
yellow, "Iowa Silver Mine",
and "Imperial" white; Three Best
varieties in the World; Pure, bred,
thoroughly graded and always grows.
Planted by thousands of farmers everywhere for
quarter of century. Earliest big yield in existence;
won more prizes than all other sorts. It's
guaranteed to please you. Change your seed and
grow bigger yields. In the kind it PLANT. Our
big fine illustrated Catalog of all Farm and
Garden Seeds is FREE. Write for it today; a
postcard will bring it to your door. Address:
RATEKIN'S SEED HOUSE,
Shenandoah, Iowa.
(The largest Corn Seed Growers in the World.)

Your Crops Will Be Money Makers
If you sow our Hardy and Reliable Northern Grown Seeds, we are growers of new and improved varieties of Seed Grain, Seed Corn, Seed Potatoes and of pure and hardy strains of Vegetable Seeds. Our stock of high grade Timothy, Clever Seed, Turkoman Alfalfa, Dwarf Essex Rape, etc., is the most complete. Clover-Grass Mixtures for Permanent Pastures and Meadows are our specialty. Also Hardy Small Fruit Plants, Ornamental Shrubs, Flowers, etc. Best railroad connections. Special Brad rates to the Northwest. Large Illustrated Catalog Free. Farmer Seed Company, Faribault, Minn. 34th Street.

TREE PROTECTORS
75 cents per 100
\$5 per 1,000
As valuable in summer against sun-scald, hot winds, etc., as they are in winter against cold and rabbits. Recommended by all leading Orchardists and Horticultural Societies. Send for samples and testimonials. Do not wait until rabbits and mice ruin your trees. Write us today. Wholesale Nursery Catalogue now ready. Send for copy. Agents wanted everywhere.
HART PIONEER NURSERIES
Box 17, FORT SCOTT, KANS.

GOLDEN YELLOW CALLA LILY, 5 Bulbs.
50 KINDS FLOWER SEEDS 10c.
Asters, Balsam, Canna, Calliopsis, Nasturtium, Morning Glory, Pansy, Larkspur, Jobs Tears, Poppy, Golden Glow, Snapdragons, Cosmos, Bell, Zinnia, Verbenas, Monkey Flower, Sweet Rocket, Primroses, Ice Plant, Pelargon, Castor Oil, Beans, Portulaca, Candytuft, Sweet Peas.
5 CHAMPION BULBS.
The Summer Hyacinth, Golden Lily, Humming Bird, Gladiolus, Giant Tuberose, Baby Breath, Oxalis, all this beautiful collection of seeds and bulbs only 10c. in silver or 5c. stamped to pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10 cents.
CHARLESTOWN NURSERY, - CHARLESTOWN, MASS.

SEED PRICES CUT IN TWO
That's just what Salzer is doing—distributing among planters everywhere countless bushels of bushy, Northern Grown Pedigree Seeds at one-half their real value. Take advantage of this unusual offer by sending to-day for a free copy of the Book of
Salzer's Bargains
and getting your year's seed before the supply is exhausted. Cabbage, Beets, Radish, Onions, Corn, Beans, Tomatoes, also Salzer's famous flower seeds, such as Oats, Speltz, Barley, Potatoes, Timothy, Clover, Wheat, etc., all of them the cream of last season's wonderful growth on our seed farms.
LUSCIOUS RADISHES
Everybody loves a tender, juicy radish and we want everybody to have them! Send this notice to-day and receive free Bargain Seed Book and sufficient Radish seed to keep you in luscious radishes all summer long!
Remit 4c and we add package of Convolvulus, the most fashionable, serviceable, beautiful annual flower.
JOHN A. SALZER SEED CO.,
Lock Box 56, La Crosse, Wis.

Live Farmers Meet at Stillwater, Okla.

The college town of Stillwater has recently been the "Hub" of Oklahoma agricultural and live-stock interests. Five hundred citizens representing every county in Oklahoma save one, and many parts of the Territory have been in attendance at the college short course in stock-judging and seed-selection, which is working harmoniously with sessions of the Oklahoma Improved Stock-Breeders' Association, and a public sale by its members of pure-bred horses, cattle, hogs, sheep, and poultry. It brought the live-stock talent of the new State—soon to be—the best gathering in its history. The grain and cotton farmers simply could not stay at home with such features as the Oklahoma Corn-Breeders' Association, and some of the best talent from the Department of Agriculture at Washington, and whole volumes of new experimental information fresh from the experiment station. The Oklahoma people attain by leaps and bounds the position that it has taken years for the older States to work out. The whole plan and program worked out as only such affairs can where the management has the details perfectly in hand as have Director Fields and Professor Burtis and their able corps of assistants at this station. The whole week was crowded, if not overcrowded, with good things, all too good to miss. The Oklahoma Shorthorn Breeders' Association, the meeting of which had been called for this week, found the time so taken up with the sale in which so many were interested as sellers or buyers, that it was decided to adjourn the annual meeting, to take place at the Midland live stock sale, at Oklahoma City, March 14-16, 1906.

Professor Spillman, Department of Agriculture, Washington, D. C. developed one of the features of the convention in his presentation of the subject of "Farm Management" and "Problems of Heredity" in live-stock breeding. Dr. Webber, specialist in plant-breeding, got very close to the stock-breeders and farmers with his address on the improvement of the corn and cotton plants by seed selection, both of which were nicely illustrated by some excellent lantern slides. J. F. Stodder, of Burden, Kans., had a very excellent paper "The Value of a Pedigree," which was well received by the breeders.

The attendance this year is several times over 100 per cent better than last year, and what is more encouraging to the management was the enthusiastic attention and close interest manifest by those in attendance. Whether at the Improved Stock-Breeders, or at a session of an institute on improved feeding methods, they were always improvers of some kind.

Unfortunately Colonel Harris could not reach here until the very last of the session, but as he was here last year and is quite well known nearly all remained to get the good things that he always has for his hearers.

F. S. Kirk, of End, was here all the week with his pets, the Air Ship and Council Chimes. Mr. Kirk and his horses have taken care of the interests of the light horse and added very much to the interest of the meeting. H. W. Avery, of Wakefield, Kans., was here to champion the cause of the draft-horse for the Oklahoma farmers, and, judging by the interest they take in the drafter, Mr. Avery is not going to have a very hard time in pushing the claims of the big horse in Oklahoma.

The consignors at the sale, while not enthusiastic on the prices realized for their stock are very much pleased with the outlook for good pedigree stock of all breeds.

That the stock-breeder is well liked in Oklahoma is beyond question. At the last session lively interest was manifested in the location of the next meeting and nearly all of the good towns of the Territory vied with each other in the amount of good things they would do for the next annual meeting of the Improved Stock-Breeders' Association. After a lively consideration of the matter, it was decided to take the next annual meeting to End, and the prediction is freely made that this wheat-belt location will witness the largest attendance and the best contribution of high-class stock to the public sale, held in connection with the meeting, that has ever taken place in the Territory. Here we have the Improved Stock-Breeders' Associa-

We Are Growers of Pure-Bred, Medal-Winning Fire-Dried Seed Corn.

Twenty-five varieties. Will send you one of our new 1906 catalogues and four varietalies, two white and two yellow, of what we consider the best for your section, or will send samples of any variety you may desire. **MANY FARMERS ARE DOUBLING THEIR YIELD WITH OUR SEED.** Our catalogue of farm, field and garden seeds will tell you why this is, and how you can do the same. Sent free on application.

J. B. ARMSTRONG & SON, Shenandoah, Ia.

tion, Corn-Breeders' Association, The Improved Breeders of the Wheat Belt, and the Oklahoma Shorthorn Breeders' Association; all of which are prospering wonderfully in the work they have undertaken. Truly Oklahoma is great.

S.

Live vs Dead Rabbits.

EDITOR KANSAS FARMER:—For some years I have been interested in the utilization of by-products, and I have been wondering if there is not some way in which we can get more out of our common rabbits.

My idea is that we ought to trap them with the Wellhouse or similar traps, and ship them to the cities in crates like live chickens. This would be advantageous in various ways, as follows:

1.—It would give the consumer this variety of game in the very best condition possible. It would be fresh, free from gun-shot wounds, and would be a much more sanitary article of diet.

When we have a cold spell, the hunters go out and shoot a whole lot of rabbits, and ship them to the cities. As soon as the weather gets warmer, these rabbits are soon unfit to eat. Yet, no doubt, many poor people eat them at the expense of their health. The writer is quite fond of rabbit, and has lived in the city for some years, but he never could muster up enough courage to buy any of the rabbits for sale at the meat-markets. He lived at Mena, Ark., seven years ago, where there were wild turkeys, deer, black bear, and other kinds of game, and he thinks a nice, fat rabbit is as nice as venison. But it must be prepared properly, and to have it trapped is one of the first requisites. There is no doubt in my mind but what the flesh is tainted when a lot of rabbit-fur is shot into the body, as is the case with the common shot-gun. I have been told that in dressing a mutton, if the hand which holds the wool touches the flesh, it will taint the meat.

2.—It would make it so much nicer for the commission man to have the rabbits shipped alive. He would not have so many losses, and could pay a better price. Then there would be the satisfaction of handling this game in a sensible way.

3.—It would enable farmer boys to make some money out of this game in a much easier way than it is done now. It would be so much nicer to go around of a morning and take the rabbits out of the traps which are scattered over the farm. If they did not care to ship them, they could make arrangements with the local huckster, who, no doubt, would be glad to help the cause along.

I wonder how many farmer boys there are in this State who will be willing to take this matter up, and make it a success?

GEO. S. SOMERS.
Johnson County.

STORED ENERGY.

With a mandrel 4 feet 1 inch long by 1½ inches in diameter, weight 31 pounds and a 95-pound balance-wheel, 21 inches, 2½ inch face, run as long as a straight mandrel 3 inches in diameter, of the same weight, if run at the same speed, if the belt fly off?

Nemaha County. OTTO C. WEYER.

In reply to the above I will say, that the 1½ inch shaft carrying the 95-pound balance-wheel, should run longer after power is taken off than the 3-inch shaft without balance-wheel but weighing the same as the combined weight of the 1½ inch shaft and fly-wheel. The length of time that either will run after the power is removed, depends upon the energy stored up in the rotating parts during the time that the power is applied. The amount of this energy depends not only upon the weight of the parts, but upon the distance of the center of weight from the center of the shaft. For this reason, the combined shaft and fly-wheel, having its center of weight farther from the center of the shaft, will store up more energy per pound of weight than will the large shaft run without fly-wheel.

This answer presupposes that the two shafts run at the same speed and that they are under the same conditions as to proper size and condition of bearings, and that each is properly adjusted.

E. B. MCCORMICK.

ARDEN SEED FROM A GARDENER

If you want to have the finest market garden you ever grew, get your seed of a market gardener.

HENRY FIELD
is a successful market gardener as well as a seedsman. He tests all the seed in his own garden before he offers a grain of it for sale. He don't claim all kinds of impossible things for his seed. He's honest in his statements and pictures and you'll appreciate his way of treating you. Write for the catalogue today. It's free.

HENRY FIELD, Gardener and Seedsman, Box 55, Shenandoah, Iowa.

\$5,000

Reward will be paid to any person who can find one atom of opium, chloral, morphine, cocaine, ether or chloroform in any form in any of Dr. Miles' Remedies.

This reward is offered because certain unscrupulous persons make false statements about these remedies. It is understood that this reward applies only to goods purchased in the open market, which have not been tampered with in any way.

Dr. Miles' remedies cure by their soothing, nourishing, strengthening and invigorating effects upon the nervous system, and not by paralyzing and weakening the nerves as would be the case if these drugs were used.

For this reason Dr. Miles' Anti-Pain Pills are universally considered the best pain remedy.

"I have suffered for 25 years with severe pains in my head, heart and back, and have tried everything I could get and could not find any relief until I got a box of Dr. Miles' Anti-Pain Pills. I suffered as long as 12 hours at a time with such severe pains that I feared I would lose my mind. The Anti-Pain Pills gave me relief in from 10 to 20 minutes. I do not have to use Morphine any more. I wish you would publish this so that other sufferers may find relief."

I. A. WALKER,
R. F. D. No. 6, Salem, Ind.
Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails he will return your money.
25 doses, 25 cents. Never sold in bulk.
Miles Medical Co., Elkhart, Ind.

DEAFNESS and CATARRH CURED FREE 64 PAGE BOOK

Tells how you can cure yourself of Deafness, Headaches, Ringing in the Ears, Discharging or Ulcerated Ears, Catarrh, Hay Fever, and all other Ear, Nose or Throat Diseases, at your own home in a simple, harmless manner without visiting a doctor.

BOOK TELLS ALL ABOUT DEAFNESS
Describes all the various forms of Deafness, what causes them, etc. Contains many pictures showing construction and mechanism of the ear and how the common constitutional diseases affect the hearing.

Write for one of these books today. I will send it free to anyone, anywhere. Address, DR. W. O. COFFEE, 872 Century Bldg., Des Moines, Ia.

When writing advertisers please mention this paper.

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc-Jerseys and Poland-Chinas.

Write us for description on June, July and August pigs. Prices \$8 to \$10 each. Eight choice herd sows, guaranteed. Prices right if taken at once.

NEWTON BROS., Whiting, Kans. Breeders of Registered Duroc-Jerseys.

COUNTY SEAT HERD DUROC-JERSEY SWINE Geo. Briggs & Son, Clay Center, Neb. Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.

E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE, Wichita, Kansas. Farm two miles west of city on Maple Avenue.

Orchard Hill Herd of Duroc-Jerseys.

Please write for private sale catalogue of young boars and bred gilts and sows. **R. F. NORTON & SON**, Clay Center, Kans.

Fairview Herds, Duroc and Red Polled A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

Sabatha Herd of Duroc-Jerseys

Geo. Kerr, Sabatha, Kans.

Specialty of bred sows and gilts. Two of the best boars in the country at the head of herd. Write for prices or call. Phone at farm.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and all six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER, Frankfort, Kansas.

HIGHLAND HERD OF DUCOC-JERSEY SWINE

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plethora of fall boars [sired by Cole's Duroc 15131, Hunt's Model 20177, Chapius' Duroc and Joe Fox by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

CRIMSON HERD OF DUROCS

Our herd is headed by first Price Boar Crimson Wonder, 38755, jr., by Crimson Wonder, 26355, the great Boar Winner of many firsts, assisted by Kerr's Champion, 34469, this fine boar is now for sale, also some fine young boar gilts for sale, also some August and September pigs. **Mr. and Mrs. Henry Shrader, Wauneta, Kans.**

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, Wichita, Kans.

Egypt Valley Duros Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. **H. W. STEINMEYER, Volland, Kas.**

POLAND-CHINAS.**DIRIGO BREEDING FARM.**

Poland-Chinas for sale of the most fashionable strains. Herd boar R's Grand Chief by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale. **J. R. Roberts, Deer Creek, Okla.**

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Main's Herd of Poland-Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion, 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visited always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented.

H. N. HOLDEMAN, R. R. No. 2, Girard, Kans.

A. AND P. SCHMITZ, ALMA, KANSAS, Breeders of Poland China Hogs.

We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. **F. P. MAGUIRE, Hutchinson, Kans.**

Look out for the date of MAINS' GREAT ROLLER TRUST

BROOD SOW SALE

James Mains, Oskaloosa, Kans.

Oak Grove Stock Farm**POLAND-CHINAS**

Best strains, good individuals. Choice fall pigs, both sexes, for sale at reasonable prices.

E. E. AXLINE Oak Grove Missouri

30 miles East of Kansas City on the C. & A. "The Only Way." Long Distance Phone at farm, Jackson Co., Mo.

GUS AARON'S**POLAND-CHINAS**

Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27968, for sale. Some snaps here. Visitors welcome. Mention Kansas Farmer and write for prices.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Outward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans.

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard, Route 2, Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREE POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days. Sired by Black Perfection 37132, Slick Perfection 32804, Perfection Now 32850, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

200 HEAD POLAND-CHINAS

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, 1-2 Mile Sedgwick, Kansas

CHESTER WHITES.**O. I. C. SWINE**

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs**Scotch Collie Dogs****B. P. Rocks**

One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandane Nobie. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm, H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Una, Silver Mina and others. Head-quarters for Bears and Gilts. Write me.

O. L. KERR, Independence, Mo.

CHESTER WHITES.

O. I. C. THE WORLD'S BEST SWINE

200 head all sizes, both sexes, singly, pairs, trios or small herds. A large number by Norway Chief 12263 grand first and sweepstakes boar Nebraska State Fair, 1904. Top quality. Rock bottom prices. Write to-day for prices to

FISHER LIVE STOCK CO., Hastings, Nebraska.

BERKSHIRES.**EAST RENO BERKSHIRES.**

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous El. Rohrholm, Berryton Duke and L. Premier strains. A. D. Willems, Iamua, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72686. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS., Route 1, Lawrence, Kans.

SUTTON'S BERKSHIRES**Imported Blood**

30 extra choice Boars, 100 to 150 pounds.

40 extra choice Gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kansas

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee G138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56203, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65036, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 8 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.**THE SUNFLOWER HERD PURE-BRED****Angus Cattle**

Herd headed by HALE LAD 36045. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale.

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

RED POLLS.

ENGLISH RED POLLED CATTLE—Purs-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see.

CHAS. MORRISON & SON, Route 2, Philipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle

Young Stock for sale.

WILKIE BLAIR, - Girard, Kansas.

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses and Plymouth Rock Chickens.

Address S. C. BARTLETT, Wellington, Kansas.

HALCYON HOME STOCK FARM**Polled Durhams**

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

GALLOWAYS.

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, Furley, Kans.

Breeder of Galloway cattle.

HEREFORDS.**Registered Herefords**

Individual merit and choicest breeding. Dale Duplicate 2d at head of herd. Correspondence solicited. **A. JOHNSON, Clearwater, Kans.**

Vermillion Hereford Co., VERMILLION, KANSAS.

Boatman 58011 and Lord Albert 131557 head of herd. Choice young stock of both sexes for sale.

E. E. Woodman, - Vermillion, Kansas

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 66684, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans

Blue Valley Herefords and Poland Chinas

A fine lot of young bulls and heifers for sale cheap. Bulls from six months to two years old. Also a grand lot of Black Langshan, Buff Cochinchin and Barred Plymouth Rock Cockerels for sale.

COTTRELL BROS., Irving, Kans.

SHORTHORNS.

ALFALFA LEAF STOCK FARM
JOHN REICHER, Prop., Whitewater, Kans.
Breeder of thick-skinned, early-maturing Shorthorn cattle.
NONPAREIL STAR 18848 at head of herd.

Rocky Hill Herds.
Shorthorns and Percherons.
In special offer a number of Scotch and Scotch-bred females bred to Sultan, a good Scotch bull. Also some good bulls ready for service. Prices reasonable.
J. F. TRUE & SON, Perry, Kans.
R.R. Station Newmar, 12 mi. east of Topeka.

**ALYSDALE HERD
SHORTHORNS**

Headed by the great Cruikshank bull, Prince Consort 187008, sired by Imported Prince of Perth 154879, and out of own sister of Lavender Viscount 124755. 3 Fine Young Bulls—13 to 16 months old, for sale, at very reasonable prices.
Sired by such bulls as Lord Mayor, Mayor Valentine, and Proud Knight.

C. W. MERRIAM,
Columbian Building, Topeka, Kansas

**SOLDIER CREEK HERDS OF
Herefords, Shorthorns, Polled Shorthorns**
Service Bulls—Herefords: Columbus 17th 91864, Columbus Budbybody 141836, Jack Hayes 2d 119781. Shorthorns: Orange Dudding 149469, Polled Short horns: Scotch Emperor 133646, Crowder 204815. Herds consist of 500 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address
Joseph Pelton, Mgr., Belvidere, Kiowa Co., Ks

Pearl Shorthorn Herd
46 Young Bulls for Sale, ranging from 6 to 24 months old and sired by the noted Scotch bulls, Baron Ury 2d 124970, Sunflower's Boy 127387, and Bold Knight 179054. Address
C. W. TAYLOR,
(Wire or Phone), Pearl, Dickinson Co.
(Mail R.R. No. 2), Enterprise, Kans.

SHORTHORNS
Public Sale, April 10, 1906
...40 HEAD...
A. M. Ashcraft, Atchison, Kansas.

Cedar Heights Shorthorns
Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8.
Topeka, Kansas.

New York Valley Herds
of Shorthorns and Berkshires
Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall heifers and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1, - - - Yates Center, Kans.

HOLSTEINS.



C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young bulls and a few young cows and heifers for sale.

FIFTH TERM
JONES' NATIONAL SCHOOL
of
Auctioneering and Oratory
Davenport, Iowa
6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President

**STOLL'S STAY-THERE
EAR MARK.**
The best and cheapest ear-marks made. It possesses more points of merit than any other make. Send or sample. H. G. Stoll, Moline, Ill.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large, black, with light points, prices right. Write me what you want. Address:

WALTER WARREN, Veterinarian,
Windsor, Mo.

**REGISTERED BLACK MAMMOTH
and CATALANIAN JACKS, SADDLE and TROTTING HORSES**
The best in the state and at a low price. Come, or write for prices on what you want.
G. A. FEWELL
LEETON, JOHNSON CO., MO

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700 pounds, 4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kans.

**DO YOU WANT
GOOD READING**



The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$2.00
The Cosmopolitan.....	1.00
Woman's Home Companion.....	1.00
Kansas Farmer.....	1.00
Total	\$6.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

**KANSAS FARMER CO.,
TOPEKA, KANSAS.**



**Cheap Trips
Southwest**

If you've never been Southwest to Oklahoma, Indian Territory or Texas—there is a treat in store for you. Besides escaping the wintry weather here, a trip now may prove of far greater benefit to you. There are more and better opportunities for making money—for home building, in the Southwest to-day than anywhere else. You have only to get on the ground to prove this.

Rates Cheaper Than Ever
February 6th and 20th
March 6th and 20th

On above dates most lines will sell both one-way and round-trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

If you're in any way interested in the Southwest, I'd like to send you my paper "The Coming Country." Address

W. S. ST. GEORGE
General Passenger Agent
580 Wainwright Building, St. Louis, Mo.

Tickets are on sale everywhere, via Missouri, Kansas & Texas Railway.

Farmer's Account Book and Ledger
Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address:

**KANSAS FARMER CO.,
Topeka, Kans.**

LIVE-STOCK AUCTIONEERS.

LIVE-STOCK AUCTIONEERS.

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

Bunceton, Mo.

**First
Class
Service.
Best
Results.
Terms
Low.**

Z. S. BRANSON,
Live Stock Auctioneer
Lincoln, Neb.

Thorough knowledge of breeds, bloods and values. Terms reasonable. Inquiries cheerfully answered.

JOHN DAUM,
Live Stock Auctioneer
Nortonville, Kans.

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

JAS. W. SPARKS

Live Stock Auctioneer
MARSHALL, MISSOURI

Fifteen years selling for America's best breeders. Moderate terms for best service.

BERT FISHER,
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans. Thoroughly posted on pedigrees. Ten years experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent, at cost of handling only when employed. Ind. Phone 25. Bell Phone 22



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty. All Herd Books. Catalogues compiled. Sale tent free.

Profitable Stock Feeding

... by ...

**H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY,
NEBRASKA, UNIVERSITY.**

How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

Kansas City to Seattle

Two Daily Trains over Shortest, Quickest and Most Interesting Route

Northwest passengers now have choice of two thru' trains, one leaving Kansas City Union Depot at 9.50 a. m. and the other at 6.05 p. m.

Both have thru' standard sleeping cars, thru' tourist sleeping cars, thru' chair cars, and dining car service all the way.

Tell me where you want to go and I'll tell you how best to get there and the cost.

**Burlington
Route**

E. A. ABIGGIFT, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humble good" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

151—STALLIONS—151

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent "top stallions." All registered, approved and stamped by European Government Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State fair. At Iowa State fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and judge. Iams pays horses' freight and buyer's fare, but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1,000—SAVED AT IAMS'—\$1,000

Key! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallions at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by "slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM

Breeder and importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS.

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, Westphalia, Kansas.

FIFTH ANNUAL SALE

Fifty Registered Percheron Stallions and Mares, from Whitewater Falls Stock Farm, J. W. and J. C. Robison, Props., Towanda, Kansas

SALE HELD AT WICHITA, KAN., FEB. 21, '06

25 STALLIONS AND 25 MARES

Send for Catalogue to J. C. ROBISON, Towanda, Kansas

200 HEAD

OF

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

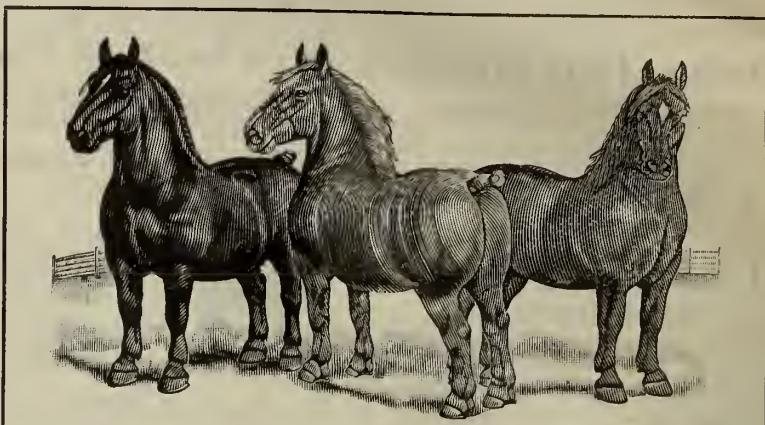
Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager,

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists Physical Culture, Animals, Building Plans and Ideas Beautifying Homes, Splendid Stories, Brilliant Humor Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	FOR \$1.60
PEARSON'S MAGAZINE	
NATIONAL MAGAZINE	
AMERICAN BOY OR.....	
PHYSICAL CULTURE MAGAZINE.....	

Address

KANSAS FARMER COMPANY

TOPEKA, KAN.

QUALITY, SIZE AND THE BEST OF BLOOD WILL BE FOUND IN OUR DUROC - JERSEY BROOD SOW SALE

Tuesday, March 6, at farm, four and one-half miles southeast of Republic, Kansas

Thirty tops of our herd will be sold, consisting of tried brood sows, fall yearlings and spring gilts—all sows safe in pig to the following herd boars: Shakespere 3d 17919; Model H. 37967 by 111ggin's Model; Honest John 37383 by Young John; Long Orion 37385 by Orion; King John by Honest John. Will also sell four Aberdeen-Angus bull calves. One registered calf, Eratum No. 74064, sire Eras of Linwood No. 46173, dam Gladys C. 31894. All stock in best of health. Catalogues ready.

Ward Bros., Proprietors,

COL. JOHN BRENNAN, Auctioneer.

Republic, Kansas

Twenty-eighth Annual

Jack and Jennett Sale

Tuesday, March 6, 1906, at Limestone Valley Farm



6 miles east of Sedalia, 2 miles north of Smithton, Mo.

Sixty head of registered jacks and jennets of the same breeding and great merit that won for us 70 of the best prizes at the World's Fair at St. Louis, 1904. Terms cash. Every representation guaranteed. Sale at 10 a.m. in heated tent. One of the very best offerings ever offered at public sale. Write for catalogue and come. You will be pleased with our stock and we will be pleased to entertain you at our expense.

27 Jacks Like the Above to Be Sold.

L. M. Monsees & Sons, - Smithton, Missouri

Auctioneers: L. R. Harriman, Jas. Sparks, C. J. Hieronymus, J. Z. Wells, W. D. Ross, J. D. Thompson.

Dispersion Sale of Galloways



Having decided to retire from active business, I will sell at public auction at

Hope, Kans., March 6, 1906,

all my Galloway cattle consisting of 23 head of females aged from 10 months to 8 years old, and 10 bulls, registered Galloways from 10 to 30 months old. This is a herd of well-bred registered Galloways, among which are Senora R. 18200, 3d prize 2-year-old Iowa State Fair 1902, in class of 12; and first at Nebraska State Fair 1902. She is the mother of several in this sale. Pearl of Maples 11522, mother of several show animals, also several in this sale. Epheme of Waverley 11904, dam of Ethel, champion female of Winnepeg 1901, mother of several. Sallie W. 18947 from imported cow and others. Will also sell 15 mules 3 and 4 years old. About 40 high-grade Galloway cattle and milk cows and a lot of other stock.

Sale to begin at 10 o'clock. Cols. J. R. Burton and H. R. Little, Auctioneers. Address

Thos. Gribben, Hope, Kans.

C. S. Nevius' First Annual Sale

Shorthorn Cattle and Poland-China Bred Sows

March 13, 1906, at his farm at Chiles, Kansas

Forty-five bred sows; 15 aged sows and fall yearlings bred to Designer 39199; 25 Chief Ideal 2d gilts bred to Designer and Royal Model. Hog sale at 10 o'clock sharp. Forty-five Shorthorns, our entire 1906 show herd. Twelve of our best brood cows, balance yearling and 2-year-old helpers. Twelve good bulls, at least four are show bulls.

C. S. NEVIUS
Chiles, Miami County, Kansas

CLOSING-OUT SALE OF OSAGE VALLEY FARM

JACKS & JENNETS AT MORAN, KANSAS

28 miles west of Fort Scott

Friday, March 9, 1906

Thirty head of extra good jacks and jennets, as follows: 4 big boned Mammoth black, registered jacks from 14½ to 16 hands high, from three to seven years old and six coming two year old from 13 to 15 hands high, Standard measure, and 18 head of well bred jennets, from 13 to 15½ hands high, four of which have good jack colts by side, sired by Giant 943. The best opportunity of the season to buy a young jack and raise him. A grand opportunity to buy jennets in foal. Stock will all be guaranteed as represented and sold without a reserve bid, rain or shine. Terms cash or good note drawing 8 per cent interest on ten months time. For any information address

W. D. GOTTE, Xenia, Kansas

AUCTIONEERS: JAS. W. SPARKS, LAFE BURGER, AND OTHERS

DIAMOND GREEK STOCK FARM

Public Sale of 50 Head Standard Bred Horses

AT THE FARM ADJOINING

HERINGTON, KANS., MONDAY, MARCH 26, 1906

CONSISTING OF

Brood Mares, Young Stallions, Geldings and Fillies

Ranging from 1 to 3 years old...

Including some of the best stock ever sold in the State. Our leading stallion is Escobar, 2:13 3-4

SALE UNDER COVER. STOCK SHOWN AT ANY TIME PREVIOUS TO SALE

For Catalogue address **J. W. CREECH, Proprietor,**
HERINGTON, KANSAS

Public Sale

Scotch and Scotch-Topped Shorthorn Cattle

at Live-Stock Pavilion,

Kansas City, Missouri, Monday, March 12, 1906

Fourteen bulls and 24 females. The bulls are all large, strong, growthy individuals, dark red in color, ranging in ages from 2 to 4 years. The two herd bulls included in this sale are straight Scotch Brawith bulls and most of the cows will have calves at foot or be bred to them. The females are Scotch and Scotch-topped Young Marys, Brawith Buds, Moss Roses, etc., and are a useful lot. Send for catalogue at once.

G. W. Wood, Winston, Missouri

Col. Bellows and Graham, Auctioneers.

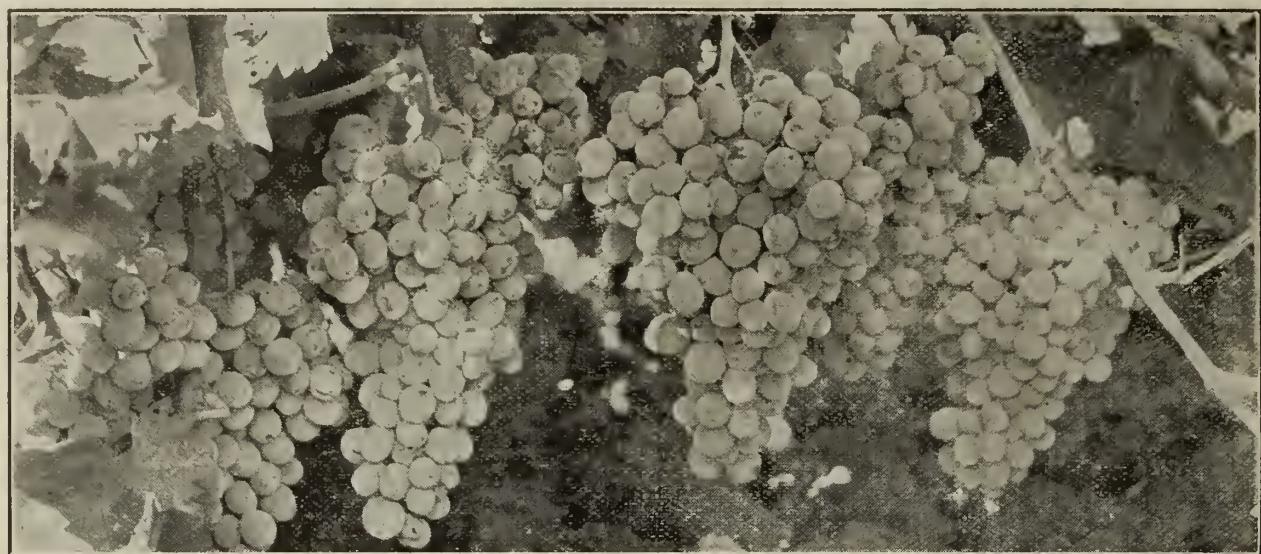
WATER IS KING

In California

And We Have A Kingdom of Water

**80 Miles
of Ditches**

Supply abundance of water from far away Mt. Whitney, the second highest mountain in the United States, to every 160 acres of my tract...



The Flaming Tokay Grape. The most productive grape raised for shipping purposes in California.

**720,000
Cubic Feet
of Water**

Flow through our headgates every hour—just figure what this means to our Irrigated Farms at 62 1-2 per acre per year

Fresno County Irrigated Farms the most Fertile in California

Where there has never been a crop failure. We are not "sky farmers." We do not have to wait for rain to fall from above—we just open a headgate and get all the water we need. Here are a few facts. Compare them with your own returns:

MR. R. A. LARSON	realized \$734 for dried peaches at 7c per pound, gathered from 400 trees, season 1905.
MR. H. PRENTICE	realized \$1000 for dried peaches on 4 acres of peaches; expense \$200; net profit, \$800.
MR. P. J. WOLF	realized \$800 for dried peaches on 4 acres of peaches expense \$150; net profit, \$650.
MR. ELA ESBJONSON	sold 10 ton dried peaches at 7½c per pound, from 8 acres. \$1500
	Sold 3 tons fresh peaches at \$29.50 per ton. 236
	From 4½ acres of vineyard sold raisins. 480
	2216
Expense—Cultivation, picking, etc., on 12½ acres.	350
Pretty good for a young place—net.	\$1866

Write to us. We will gladly send you our latest booklet telling you all about the great opportunity in this fertile land.

Farm Lands—\$35.00 per acre and upward to \$75.00—No Higher

Vineyard
Orchard
Alfalfa
LANDS



Chicken,
Cattle and
Hog Ranches

**BERRY
F FARMS**

Home Ranch. Office Building of Fresno Irrigated Farms Company. Showing growth of palms and trees.

**Fresno Irrigated Farms Co.,
Fresno, California**

Main Office—511-514 Kohl Bldg., San Francisco, California
Fresno Office—1161 I Street, Fresno, California

KANSAS FARMER

Volume XLIV. Number 10

TOPEKA, KANSAS, MARCH 8, 1906

Established 1863. \$1 a Year

STATE DAIRY ASSOCIATION ON THE SANTA FE.

The Santa Fe Railroad Company ran a dairy train over a portion of its lines in Kansas last week. Several lecturers on dairy subjects made the trip. Two coaches were used as lecture-rooms. Thirty-five stops of about an hour each were made in four days. The schedule had been well advertised so that on arrival of the train at one of the favored stations, there was a crowd ready to enter the lecture coaches. Two lectures were given in each coach at each stop where more than fifty people had assembled. If there were no more people than could be comfortably accommodated in one coach, but one was used. A baggage car was devoted to exhibits

KACKLEY, 3.05 p. m.....	45
COURTLAND, 4.09 p. m.....	35
LOVELL, 5.16 p. m.....	25
WEBER, 6.18 p. m.....	75
Total attendance.....	3,467

The lecturers were, Hon. Ed. H. Webster, Chief of Dairy Division, United States Department of Agriculture; Oscar Erf, Professor of Dairy Husbandry, Kansas Agricultural College, Late Superintendent Dairy, Louisiana Purchase Exposition; W. W. Marple, President of the Missouri State Dairy Association, and without a peer as a practical dairyman; A. L. Haecker, Professor of Dairy Husbandry, Nebraska Agricultural College; second only to his father as a dairy authority; E. W. Curtis, Late Assistant Professor of Dairying, Kansas Agricultural College, and a

dresscs, there were not so many farmers as were in the smallest audience that met the Santa Fe train during its first day out.

In the absence of Secretary Graham, L. M. Nellis, of the KANSAS FARMER, in cooperation with the railroad officials, managed the enterprise.

The speakers were introduced by Pres. H. Van Leeuwen of the State Dairy Association. Mr. Van Leeuwen is a practical butter- and cheese-maker, well informed on the scientific side of the business, and withal possessed of the rare ability to bring out the best there is in those with whom he comes in contact.

It is to be hoped that the great success of this industrial lecture train on

College as being carried on by Prof. O. Erf, head of this department.

Whereas, it has been through the co-operation of the Santa Fe Railroad Company, aided by the service of its officials, that the dairy train has been made possible, resulting in carrying the dairy gospel to more farmers than have ever been reached by all the farmers' meetings of the Kansas State Dairy Association.

Therefore, be it resolved that this association extends to the Santa Fe and its officials a hearty vote of thanks for the privileges, courtesies, and cooperation extended.

Furthermore, be it resolved that the Kansas Legislature be requested to provide for an appropriation of \$10,000 for this particular department in order that it may carry on investigations especially for field work experiments, and in general increase the scope of the good work as being carried on now by the department.

Whereas, the dairy industry of the United States is of such magnitude and importance as to command first place among agricultural pursuits, it is desirable that greater recognition be given to the industry by the United States Department of Agriculture than has been accorded in the past.

Therefore, be it resolved that this association heartily endorses the movement that has been voiced by the dairy press and by dairy organizations throughout the country, that the dairy divisions of the Bureau of Animal Industry be made a separate and independent bureau of the Department, thus recognizing the great importance of dairying, placing the divisions in position to receive greater recognition from Congress and to enable the seat of agriculture to give the dignity and standing to the industry it deserves.

In view of the fact that this has been one of the greatest dairy meetings from an educational standpoint that has ever been held,

Be it resolved, that the association hereby express its appreciation of the assistance rendered by the following able speakers: Hon. Ed. H. Webster, Prof. Oscar Erf, Hon. W. W. Marple, Prof. A. L. Haecker, Prof. E. W. Curtis, T. A. Borman, also to Mr. C. L. Seagraves, J. C. Barnett, R. E. Wilson, and C. B. Spencer, officials of the Santa Fe Railroad, who accompanied the train and did everything possible for the convenience and comfort of their guests; and to representatives of the press for the publicity given through their columns, and for the general interest manifested by Mr. L. M. Nellis of the KANSAS FARMER, Mr. Walker of the Drovers' Telegram, and Mr. Peters of the Kansas City Star.

Resolved, that it is the sense of this meeting that local dairy associations be organized throughout the State, where several times each year groups of dairymen in their several localities can be brought together for the discussion of questions in which they are interested, and that the officers of this association be asked to cooperate with such local associations in procuring speakers, and in any other way within their power.

A QUESTION OF INHERITANCE.

EDITOR KANSAS FARMER:—I would like to ask you a question in regard to a matter of law. I will state the case exactly as it is.

A man dies, leaving a widow and eight living children, and one child dead who left a husband and five children. The widow quitsclaims all her interest in the estate (which would be one-half) to the children of her husband, Wm. Johnson, deceased. This is just as the deed reads. Would the children and husband of the child who was dead at the time the widow quitsclaims her interest, be included in the deed?

Please state where we will find on the statutes a law providing for cases of this kind.

A SUBSCRIBER.

The Kansas laws controlling descents and distributions of estates of deceased persons are contained in Chapter 109 of the Revised Statutes. Section 18 of this chapter provides that the estate to be divided among the heirs shall, in the absence of a will, "descend in equal shares to his children surviving him, and the living issue (if any) of prior deceased children; but such issue shall collectively inherit only that share to which their parent



The State Dairy Association Train on the Santa Fe, at Quenemo.

of separators. Several separator experts accompanied the train. The interest in this part of the work was lively.

Following is the train's schedule and the estimated attendance:

TUESDAY, FEBRUARY 27.

Station.	Arrived.	Attendance.
Nortonville, 9.15 a. m.....	250	
Valley Falls, 10.25 a. m.....	100	
Meriden, 11.45 a. m.....	125	
Tecumseh, 1.18 p. m.....	45	
Lecompton, 2.25 p. m.....	75	
Sibleyville, 3.53 p. m.....	80	
Vinland, 4.46 p. m.....	90	
Baldwin, 5.50 p. m.....	50	
Ottawa, 7.10 p. m.....	300	
Evening meeting at court-house.		

WEDNESDAY, FEBRUARY 28.

Pomona, 8.20 a. m.....	150
Quenemo, 9.17 a. m.....	125
Lyndon, 10.40 a. m.....	200
Osage City, 12.01 p. m.....	45
Barclay, 1.26 p. m.....	70
Reading, 2.25 p. m.....	150
Emporia, 3.50 p. m.....	40
Saffordsville, 4.20 p. m.....	50
Strong City, 5.30 p. m.....	200
Evening meeting at Cottonwood Falls.	

TUESDAY, MARCH 1.

Neva, 8.38 a. m.....	20
Burdle, 10.04 a. m.....	80
Lost Springs, 11.08 a. m.....	12
Hope, 12.29 p. m.....	100
Navarre, 1.25 p. m.....	50
Enterprise, 2.30 p. m.....	60
Talmage, 3.55 p. m.....	60
Manchester, 5.10 p. m.....	100
Evening meeting at Cottonwood Falls.	

FRIDAY, MARCH 2.

Longford, 8.51 a. m.....	50
Oak Hill, 9.54 a. m.....	75
Miltonvale, 11.14 a. m.....	350
Aurora, 12.34 p. m.....	150
Concordia, 1.48 p. m.....	25

life-long dairyman; T. A. Borman, Continental Creamery, Dairy Authority and Expert; L. G. Hamburger, Separator Expert,

The lectures dealt in practical problems and were brief and plain. The KANSAS FARMER has been promised condensed statements of the matters presented.

The train was furnished to the State Dairy Association through the public spirit of the Santa Fe Company. It was accompanied by the following railroad officials: C. L. Seagraves, general colonization agent; J. Burnett, division freight agent; R. E. Wilson, industrial agent; and C. V. Spencer, milk agent. The efficient and cordial cooperation of these representatives of the Santa Fe did much to promote the success of the undertaking.

Several newspaper men were aboard, including representatives of Kansas City and Topeka papers. The snap shot of the visitors and train at Quenemo was taken by one of the KANSAS FARMER men.

The fact that over three thousand people from the farms were enabled to attend the annual meeting of the State Dairy Association by simply going to their several railroad stations, speaks volumes in favor of putting such an association on wheels. At the meeting of the State Association of a neighboring State, held recently, at which the best talent of the land delivered ad-

a portion of the Santa Fe lines will lead to such extension of the plan as will enable all farmers in Kansas with their families to receive the benefits of such lectures by simply taking comfortable seats in cars at their railway stations.

The business meeting of the association was held at Abilene on Saturday. A new constitution was adopted. The old officers were reelected with the addition of an assistant secretary, as provided by the new constitution. Following are the officers

H. Van Leeuwen, president, Ottawa, Kans.; C. F. Stone, vice-president, Peabody, Kans.; I. D. Graham, secretary-treasurer, Topeka, Kans.; H. A. Heath, assistant secretary, Topeka, Kans.

The following resolutions were adopted:

Be it resolved that the Kansas State Dairy Association recommends a system of buying cream on grade, believing that the purchase of cream on its merits by which a higher price is paid for cream of good quality, is absolutely essential to the life and future success of the dairy industry in Kansas.

Whereas, the dairy industry of the United States stands second in money value in the great agricultural realm, and,

Whereas, the State of Kansas offers conditions particularly adapted to this industry but which have not been developed to the extent they ought to be for the good of the Kansas farmers and the public in general,

Therefore, be it resolved that we approve the work of the Dairy Department of the Kansas State Agricultural

would have been entitled had he been living."

The Kansas Supreme Court, in the case of Dodge vs. Beeler, 12 K. 524, held that, "If one of the children shall have died before the ancestor, the heirs of such child will take the portion which would have descended to such child if he had survived the ancestor, and the same rule obtains for determining who are the heirs of such child as in any other cases of descent."

The quitclaim of the widow in the case under consideration is in favor of "the children of her husband, William Johnson, deceased." It does not specify "living children." While this exact case does not appear to have been passed upon by the Kansas Supreme Court and while there is room for difference of opinion as to the point raised, it would certainly be in harmony with the law to hold that the children of the deceased child would be entitled to their parent's share of the portion of the estate relinquished by the quitclaim. The quotation above given from the 12th Kansas Reports is from a decision rendered in 1874. The section of law quoted is a little different from that which guided the court in 1874, having been amended in 1891. The original section before amendment would probably have made the father of the children heir to the half of the share of his deceased wife. The change in the law seems to have been made for the purpose of confining the distribution of the deceased child's share to his or her children, thus making impossible such undesirable situation as would exist in this case if the father of the deceased daughter's children were again married and had become the father of other children not at all related to Wm. Johnson, deceased. The change in the law seems, therefore, to affect only the distribution of the deceased daughter's inheritance and not the fact that she, though dead, is still represented by her children who take of their grandfather's estate just as she would have taken if alive. The quitclaim of the widow may well be regarded as only a relinquishment of her right, turning her half interest back into the estate to be distributed according to law.

BULLS AND DOGS.

EDITOR KANSAS FARMER:—Please answer through the KANSAS FARMER the following:

A has a pasture in which he has some young heifers which, owing to age, he does not wish to breed. B has a pasture adjoining, and keeps a bull. The bull breaks through the fence and A's heifers become with calf. Is B liable to damage, and can B be made to tie his bull?

B has a number of hounds which run A's cattle. A sees the dogs run the cattle and shoots two dogs. Is A liable for the cost of dogs? Please state dog laws of the State of Kansas.

Leavenworth County. F. E. B.

The Laws of Kansas, Chap. 137, Sec. 39, provide as follows: "If any bull over one year old or boar over three months old be permitted to run at large, the owner of the same shall be guilty of a misdemeanor, and on conviction thereof shall be fined for the first offense \$5, and for every subsequent offense shall be fined \$10."

Nothing is here said about restraining the bull by a lawful fence or by any specific means, but the statute says that the bull shall not be allowed to run at large. This language plainly implies that the owner of a bull, an animal proverbial for his disregard of ordinary means of restraint, must be restrained, and if not effectually restrained but allowed by the use of his strength and "bullheadedness" to be at large, the owner is guilty. The owner of the bull is bound to employ sufficient means to keep him in restraint, otherwise the owner is guilty.

Chapter 153 provides remedies where animals of any kind go through a lawful fence and cause damage. Section 34 of this chapter provides: "If any of the animals in the twenty-seventh section of this article described [horse, mule, or ass, or any neat cattle, hogs or sheep, or other domestic animal] shall break into an inclosure surrounded by a fence of the height and sufficiency prescribed by this act [a lawful fence], the owner of such inclosure may take into possession such animal trespassing, and keep the same until damages with reasonable charges for feeding and keeping, and all costs of suit, be paid, to be recovered in any court of competent jurisdiction."

These quotations from the laws are here given in the hope that they will not be used to bring a neighbor into court, but that their clear statement of the duties and rights of the parties at interest will lead to such under-

standing that each will do right, as the law says is right.

The question about the dogs is one on which the Kansas Statutes seem to be wrong, or at least deficient. With the exception of sheep, neither domestic animals, nor men, nor women, nor children have any rights which the meanest cur or the most savage bulldog is bound to respect. He may go through or over or under any fence and do as he pleases without regard to the wishes or interests of the owner of the premises only if he do not molest a sheep. In Chapter 137 it is provided: "If any dog shall kill or injure any sheep, the owner or keeper of such dog shall be liable for all damages that may be sustained thereby, to be recovered by the party so injured before any court having competent jurisdiction." It is further provided: "It shall be lawful for any person at any time to kill any dog which may be found worrying or injuring sheep."

If these provisions were extended to the protection of other domestic animals, and children, women and men as well as sheep, there might be some reduction in that part of the dog population which gives no good reason for abiding in Kansas. But at present a dog is property and therefore under protection of the law to the extent that to kill another's dog lays the killer liable just as if he had destroyed any other animal not his own.

SUGAR-BEETS IN WESTERN KANSAS.

The production of sugar-beets in Western Kansas is on the increase. According to Secretary Coburn's report the following is the five-year record:

Year	Acres.	Yield.
1901	337	1,747
1902	439	4,250
1903		695
1904	472	6,379
1905		8,605

The State appropriation for the payment of bounty on this product is \$5,000 per year. This allows but 58.1 cents per ton on the 1905 production. Had the crop been but 5,000 tons or less, the growers would have drawn \$1 per ton.

The beets of the 1905 crop were sold to the sugar factory at Holly, Colorado. Former crops were sold at Rocky Ford. A new factory is now in course of erection at Garden City, Kans.

The average yield for 1905 is not known because the aggregate acreage has not been reported. Some of the satisfactory yields are reported as follows: Alex E. Cross, of Lakin, reports an average yield per acre of 12½ tons; Wm. Logan, Lakin, 10½ tons; and B. A. Bruce, Lakin, 21 tons. J. S. Friesner, of Deerfield, who is credited with 379 tons, the largest production of any individual in the year, reports an average yield per acre of 12½ tons, and R. A. Beckett, of the same place, who ranks next in aggregate yield, harvested 21 acres which averaged 16½ tons per acre.

Reports show that a good blanket of snow, averaging about four inches, covered the northern three-fourths of the Kansas wheat belt while a good rain favored the southern portion. Thus, again, "the wheat is saved."

The Voice of the People.

W. L. Edwards, Webster, Kans., writes: "Enclosed find \$2.60 for KANSAS FARMER two years and the Cosmopolitan Magazine one year. I would liken the KANSAS FARMER to the old-time religion—it just suits me."

C. H. Dauley, Jennings, Kans.: "Here's success to the 'old reliable' KANSAS FARMER. Herewith I send you another new subscriber to your valuable, and indispensable paper at the introductory rate, namely fifty cents."

L. C. Teed, Benson, Mich.: "I have received all right the book you advertised, 'Farm Grasses of the U. S.' I thank you for it. It is a very instructive work and I believe it would be a good thing if in the hands of and read by every man and woman engaged in agricultural pursuits."

Cal. E. Pearson, Osage City: "I am so well pleased with the paper you send me that I can not express my thanks fully, so I gladly give you a few addressees of my friends who should become subscribers if they are not already on your list."

Albert Hall, Plainville, Kans.: "I notice in the KANSAS FARMER that parties are wanting greyhounds. There are a great many in this county. I have one myself, a wolf dog, but he is a greyhound." [Parties having well-bred dogs for sale should advertise them in the KANSAS FARMER.—EDITOR.]

M. Jennings, Webber, Kans.: "Enclosed find check for \$1.50 for the KANSAS FARMER one year and renew my

subscription to the Semi-Weekly Capital. I had been taking the KANSAS FARMER for several years and concluded as I had quit the farm I could get along without it; but I miss its friendly face and its wise council every week, hence my subscription."

Miscellany

Secretary Coburn Appreciated.

Secretary F. D. Coburn of the Kansas Board of Agriculture has received from the Louisiana Purchase Exposition Management the diploma and commemorative medal, "conferred in special recognition of his services as organizer and chief of the Department of Live-Stock of the Universal Exposition of 1904."

There were received with these from President David R. Francis and Secretary Walter B. Stevens personal letters highly complimentary to the efficiency of the arduous work performed there by Chief Coburn in behalf of the Improved live-stock interests and the exposition. President Francis wrote: "Your work in laying the foundation and plans for the live-stock show entitles you to the opinion of the Exposition Management that this was one of our highly successful features. From all quarters I hear nothing but expressions of satisfaction with the rules laid down and with the awards obtained under those rules. This you are entitled to know. I take pleasure in extending to you congratulations upon the results."

Secretary Stevens in a long letter said, among other things, "We all look upon you as the one who insured the success of the Live-Stock Department, and I assure you it was a great success." Also, "The medal is of the character given to directors of the exposition, members of the Cabinet at Washington, members of the foreign State commissions, and a limited number of other persons whose aid and encouragement the exposition management deserved to recognize."

As is known, Mr. Coburn's health failed under the great strain of his eighteen months work at St. Louis, and the exhibition he had planned and builded in every detail was finally made under the management of his former secretary and right-hand man, Col. Charles F. Mills, whom he had recommended as his successor.

Switch-Board Rates.

EDITOR KANSAS FARMER:—I noticed in the KANSAS FARMER of February 15, an inquiry regarding county telephone contracts. From the answer given I feel sure you do not understand all of the conditions governing the rural telephone line. The subscriber was advised to sign a contract for a period of three years or even longer if possible, at a rate of \$6 per year for central fee.

There is little comparison between a city and rural line. In the first place, the farmers usually own their lines and phones—as was the case with the subscriber making inquiry—the farmers bearing all expense of keeping the same in repairs, while in the city the lines and instruments are owned and kept in repair by the phone company. Again, there are usually as many as twelve telephones on a rural line, and this at \$6 per year for each member, makes a total of \$72 a year for each line running into central. Experience has shown that these twelve instruments give central but little more work than the average city line; \$6 is therefore too high. What would the city men think of \$72 if they owned everything but the switch-board? The very fact that the farmers are asked to contract for three or more years at this rate, is proof in itself that the central management is well pleased with such a rate. The reason, in my opinion, that the subscribers are asked to contract not to connect with any other system, is because the company realizes that the rate is too high and hopes by this means to avoid open competition.

In this county we pay a rate of \$4 per year. We were required to sign a contract similar to that mentioned by the Harvey County subscriber, but we refused to sign for more than one year and were particular to see that all contracts expired on the same date. This was to avoid difficulties in case we desired to ask for better rates the next year, or to establish a central of our own. Upon investigation we have found that even \$4 is too high; and steps are now being taken to organize the entire county into a company and either secure better rates, or establish a new central. In a city of six or seven

thousand or less, two companies can not well exist, and if the farmers establish a central they can force the other system from the field, for they are content to run their system at actual cost.

My advice to the Harvey County subscriber, would be to contract for one year and then get busy among the farmers and work up a county organization. Then if the central company refuses you better rates, put in a switch-board of your own and force them out of business. If this is done, you will get as good or better service at one-half of the present cost.

McPherson County. R. B. FELTON.

Concrete Foundation for House.

EDITOR KANSAS FARMER:—You helped me so much in my last inquiry I must come again.

What would be the best and cheapest for a foundation for a house, rock or cement? I have a great deal of small rock from the size of an egg up to as large as one's head, that I could use in a cement foundation. How broad and deep ought it to be, and do you think it would be just as good as solid rock? Would it not be a great deal cheaper, as rock is expensive here? The house is to be 16 by 34 with wing 16 by 18 feet, two stories high.

Kingman County. L. M. GAWTHROP.

If a good concrete is used, twelve inches will be broad enough for the foundation. The depth is not so easily determined without a knowledge of the nature of the soil and "lay of the land." Two feet will be deep enough for almost any situation. Many two-story houses are placed on foundations which reach only one foot into the ground. If the concrete is well handled so as to be strong and to form one stone there will be little danger of unequal setting. Such a concrete foundation should not be very expensive in parts of Kingman County, where stone of the sizes mentioned is easily procured. Sand is probably to be had for the hauling, and cement can be had at reasonable prices.

Bobby—"I think Tommy Jones is the meanest boy I ever knew."

Mamma—"What has Tommy been doing now?"

Bobby—"I said I was going to be a poet when I grew up; and he said he'd be an editor, and wouldn't print any of my poems unless I'd be his horse every time."—The Evangelist.

Table of Contents

Alfalfa.	244
Alfalfa and brome-grass for pasture.	243
Alfalfa and Bromus inermis on sod land.	245
Alfalfa, baling.	243
Alfalfa, curing.	243
Alfalfa questions.	244
Alsike clover.	245
Art and life.	252
Aunt Kate to Donald.	253
Bees, early spring management of.	248
Bee-moth and its wax-worm.	251
Boys, essay on.	253
Bromus inermis.	264
Bromus inermis, early sown.	244
Brood mares? Is cane good for.	246
Buckwheat, Russian.	244
Bulls and dogs.	242
Caponizing.	261
Catalpa seedling.	258
Coburn, Secretary, appreciated.	242
Corn-breeding in Wilson County.	264
Concrete foundation for house.	242
Cooperation (poem).	252
Corn, breeding.	243
Corn-growing contest.	265
Cow-pea questions.	243
Cow-peas.	244
Dairy association on the Santa Fe.	241
Dairy short course.	262
Domestic Science Club.	254
Farm notes.	264
Farm, possibilities on the.	252
Flowers of easy culture, some.	252
Fruit trees, growing of.	258
Geromino's eighth wife.	252
Grange in Riley County, the.	267
Grapevines, mulching.	258
Grass land, disking.	244
Inheritance, a question of.	241
Letter from a Kansas boy.	254
Live stock, Kansas.	246
Love that endures (poem).	253
Madonna, the.	253
Manchurian walnut.	258
Only a little (poem).	254
Pig is big for its age.	246
Potatoes, early, as a profitable market crop.	250
Poultry-raisers, hints to.	260
Queens, government distribution of.	248
Race question, the.	254
Recipes for croquettes.	252
Remedies for rats.	265
Roughage for cows.	244
Roughage for cows, kinds of.	262
Seed-corn, the production of good.	255
Shawnee County Pomona grange.	267
Silo, the.	262
Stable floor.	243
Stock foods.	247
Sub-surface plowing.	264
Sunday-school lesson.	267
Sunshine grange.	267
Sugar-beets in Western Kansas.	242
Switch-board rates.	242
Veterinarian, the.	261
West Side Forestry Club.	254

Agriculture

Cow-Pea Questions.

This article is written in response to the following questions sent to Prof. A. M. TenEyck, of the Agricultural Department of the Kansas State Agricultural College, from farmers over the State:

(1) What is the best way to sow cow-peas for fertilizing purposes? (2) About what per cent of fertilizing qualities would be lost if cow-peas are cut and thrashed for seed as compared with turning the whole crop under at the proper time in its green state? (3) After thrashing, what is the value of cow-pea straw or fodder as compared to millet hay not thrashed? (4) Would stock do as well on cow-pea fodder alone as they would on millet hay alone before the latter was thrashed? (5) What is the fertilizing value of cow-peas plowed under as compared to the ordinary amount of barn yard manure? (6) In what respect, if any, is the Whippoorwill cow-pea better than the New Era variety?

If it is intended to grow cow-peas for forage, the best plan is to sow in close drills, on a clean, well-cultivated seed-bed, planting about June 15. The drills may be placed twelve inches apart. Set the drill to plant about two bushels of wheat per acre, which will plant the peas at the rate of about three pecks per acre. If you wish to harvest the peas for grain, it is better to plant in rows $2\frac{1}{2}$ to 3 feet apart, and cultivate. When the peas are sown in close drills, as described above, the crop may be cut with a mower; but when planted in drill rows farther apart it is necessary to use a bean harvester in harvesting the crop, since the vines lie so close to the ground that they can not be cut with a mower. Probably the most good may come to the land by planting in drill rows and cultivating.

At the Alabama Experiment Station, as reported in bulletin No. 120 of that station, the yield of the crop planted after the cow-peas was in favor of plowing the vines under rather than taking the crop off for hay, as follows: Increased yield per acre of corn, 49 per cent; sorghum, 9 per cent; cotton, 40 per cent. In the Alabama experiment the soil was rather light and poor in quality. It was observed also that the fertilizing effect of the cow-peas plowed under was more lasting than when the crop was taken off for hay. There was a large increase in the crop succeeding the cow-peas, even when they were taken off for hay, and the question whether it will be best to plow under the green cow-peas or remove the crop from the land depends largely upon the soil. If the land has been farmed a long time and needs humus badly, it may pay to plow under the green crop; also, light or sandy soils as well as very heavy clay soils are often benefited by green manuring. Much of the average soil of Kansas of the loam or clay-loam type would receive much benefit simply by rotation with cow-peas, and it is a question whether plowing the crop under would always give increased beneficial results. As a rule, it would be preferable to pasture the crop on the land and plow late in the fall, or leave the refuse vines on the ground through the winter to serve as a cover-crop, plowing early in the spring. If the fodder can be made good use of on the farm, feed it and return the manure again to the land.

Cow-pea straw has little value for feeding-purposes. In order thoroughly to cure the peas and prepare the straw for thrashing, it is necessary to leave the crop in the field a long time after cutting, in which case it is apt to meet with much unfavorable weather, so that when the peas are finally thrashed the straw has become bleached and rotten and largely unpalatable to stock. This straw, spread over the ground, however, will make excellent fertilizing material. But cow-pea hay has a high feeding-value and is practically equal to alfalfa, while cured cow-pea fodder contains even a higher percentage of protein than alfalfa hay. As a rule, it is preferable to grow the crop for fodder rather than for seed, since the former will pay the better. Also, the cow-peas are hard to thresh, the ordinary separator splitting the peas very badly so that it practically destroys them for use as seed. It is almost necessary to thresh by hand peas that are to be used for seed, unless the farmer is provided with a bean harvester. The greatest objection to using cow-peas as a forage or green manuring crop is the price of the seed. They can be raised on any Kansas farm at a much

less cost than the ordinary market price of \$2.50 per bushel.

There are no available published comparisons of cow-peas with barnyard manure as a fertilizer. However, a good crop of cow-peas plowed under green would be equivalent to an application of a light dress of good barnyard manure. According to trials at the Kansas Experiment Station, eight tons of green cow-peas can be produced on an acre, and ton for ton the green cow-peas would be about equal to ordinary barnyard manure in fertilizing value.

The Whippoorwill cow-peas are a little ranker growing variety than the New Era, hence may give a little larger yield of forage. The New Era peas, however, mature a little earlier than the Whippoorwill, and are more apt to produce a good crop of seed than the latter. Either variety will make a good crop of forage. For planting late in the season, after wheat, the New Era are rather preferable, since they grow quickly and become more mature before frost than do late-maturing varieties. The Whippoorwill peas are excellent for planting with corn in the row, or at the last cultivation, since the vines twine enough so that they climb the stalks. The New Era variety has a less tendency to vine.

The KANSAS FARMER, for October, 1905, contains comparison of cow-peas vs. sorghum as fertilizers, by the writer.

A. M. TENEYCK.

Alfalfa and Brome Grass for Pasture.

Have you any Sixty Day oats to sell, if so at what price? I would like to get about 6 bushels.

I want to sow 40 acres to alfalfa and brome grass for pasture and meadow; what quantity of seed would you advise me to sow? This ground was put in barley in 1905, and then listed to cane and is perfectly clean. Would you advise plowing or disking this ground? I want to sow about 25 pounds of flax with it. This is all upland ground. I have about 700 bushels of Kafir-corn and barley. Would it pay to grind for hogs?

I would like to get the bulletins as they are printed. Please put my name on the list.

FRED ZURBUCHEN.

Wabaunsee County.

We still have some Sixty Day oats for sale and can let you have 6 bushels for \$5 as a special price.

I would recommend to sow about 12 to 15 pounds of Bromus inermis with 4 or 5 pounds of alfalfa-seed per acre. Cane is not usually a good crop to precede alfalfa or grass; usually there is a large growth of volunteer cane which tends to smother out the young grass and alfalfa plants; however, we have succeeded in getting a good stand of grass, by seeding after cane. I would recommend to disk and not plow in preparing the seed-bed. If there is much seed of cane on the ground it would have been advisable to plow last fall, but you will hardly be able to produce a firm, well-settled seed-bed by spring plowing. Thus the disking and harrowing will be preferable to plowing.

It will be safer to sow the grass and alfalfa without a nurse-crop; however, if the season is reasonably wet you may get a good stand by seeding with flax, as you suggest. It has been the experience at this station and also among farmers that alfalfa does not succeed well when sown with a nurse-crop; and it is true also of Bromus inermis that it will usually succeed much better when sown alone than when sown with flax or other grains. If this were bottom-land, well-watered, you would have a better chance to secure a catch of grass and alfalfa with a nurse-crop of flax than you will have on the upland, which you describe. Altogether, I would recommend to prepare the seed-bed early in the spring and sow the grass and alfalfa without a nurse-crop. If the land is not too foul with weeds, the alfalfa and grass, seeded alone in this way, will make a much quicker growth and probably a better stand than if seeded with a nurse-crop, and will furnish considerable late summer and fall pastureage, although you should not pasture too early the first season nor pasture too closely. On the other hand, if you sow with flax, even if you secure a stand, the young plants will be dwarfed and spindling in growth and produce little or no pasture the first season.

Your question on grinding Kafir-corn and barley for feed for hogs has been referred to Prof. G. C. Wheeler of the Animal Husbandry Department.

I have requested Prof. J. T. Willard, director of this station, to place your name on our mailing list so that you may receive the bulletins of the station as they are published.

A. M. TENEYCK.

That portion of your letter referring

to Kafir-corn and barley has been referred to me for reply.

Some excellent results have been obtained from feeding Kafir-corn to swine. It has been successfully fed both ground and whole, either soaked or dry. I think in value it may be considered approximately ten per cent less than Indian corn. Barley is also a good feed for hogs and produces a very high quality of pork. It is not quite equal to corn for fattening hogs but is not very far behind it when we consider the quality of pork produced. It would be better for young breeding stock than corn alone as it contains somewhat more protein than corn. It should also be ground for the best results in feeding. If you have about equal amounts of Kafir-corn and barley, I would suggest that you grind them together and wet at feeding time.

G. C. WHEELER.

Breeding Corn—Baling Alfalfa.

Of course corn can be bred up or down—bettered or worsened by selection and care of the seed. I have been a corn-raiser (not very extensive) for 20 years, and in all that time very few seasons passed when I was not trying to get a variety of corn better than I had been raising. About 15 years ago a friend of mine, living in the Missouri River bottom, across the river from Atchison, sent me four bushels of seed-corn of the large, medium late, red and white, known as the "Calico" corn. He said it would out-yield any corn on earth, and I thought so, too. The first year or so I raised it it was the roughest corn I ever saw. There was a sharp sticker on the end of each grain that would soon tear out the best of gloves or tear the hands to pieces. My men grumbled so it was hard to get them to husk it. About one ear in 100 was comparatively smooth. By selecting and planting the smooth ears, in a few years the corn was as smooth as any. So in some way I bred a part of the merit out of the corn, as the smoother it became the less the yield, and I finally discarded it for the big white corn I had been raising for years (I have no seed-corn for sale), and which is grown through this locality generally.

I have usually raised from 15 to 30 acres of early corn for hog feed and have tested about all of the early kinds and for this locality I would plant the early Silver Mine which has proved far superior to all others, while the early Gold Mine proved for me the most worthless of all the early varieties.

Both of these varieties originated, I believe, in Iowa. Several times I have ordered my seed-corn grown further north, mostly from Iowa; but I prefer to plant seed grown in my own locality. My advice, gained from experience, is for one to select the variety he likes. If one can not get it from his neighbors, then improve it by selection. The best corn-rather I know never by any means selects the largest ears, but ears of a substantial size. Both ends must be filled exactly to his notion or the ear is rejected. His corn is now all sold at several cents over the prevailing price, as a premium. The best Iowa Silver Mine seed I ever bought was from Barteldes & Co. which was the same, I think, that had been grown several years near Lawrence. One time I ordered it from Iowa; it seemed to be of the same type, but did not yield nearly as well as the home-grown seed. I am fully convinced that every one can improve their corn just as we improve our stock, by selecting the best and keeping at it. My little experience I suppose would be called both a success and a failure.

I wish some one would give his experience in the "Old Reliable" in baling alfalfa from the swath. Can it be baled from the swath if it is dry enough to put in the stack, shed or mow, as it would be impossible to get it thoroughly dry in the swath? Will it go through the sweat-curo and not mold after baling; and how green can we bale it when taken from the swath? There are a number of us around Rossville that would like information on this subject, and some one that has had some experience, good or bad, will confer a great favor on us, not only here but elsewhere, who will write an article on this subject.

M. F. TATMAN.

Shawnee County.

Curing Alfalfa—Stable Floor.

EDITOR KANSAS FARMER:—Writers in the FARMER desire to find a way to cure alfalfa. I give you the way my father and grandfather cured clover, both for seed and hay, in Germany 40 years ago, and the same was used for alfalfa. As land was very high and we carried all the stock possible, we could not run any risk of losing it by wet, and whenever

BOOK FREE **FARM TELEPHONES**, How to put them up—what they cost—why they save you money; all information and valuable book free. Write J. Andrus & Sons, 823 W. Wells St., Milwaukee, Wis.

\$7.00 Daily Av. selling Only Pump Equalizers Make all pumps work easy. Windmills run in slightest wind. Fits all Pumps. Merit sells them. Fully Waranted. Exclusive territory. Write Equalizer Mfg. Co., Waseca, Minn. Dept. 13

FENCE STRONGEST MADE. Built strong chick-en-tight. Hold to the Farm. No holes. Strong wire. Fully warranted. Catalog free. COILED SPRING FENCE CO., Box 255, Winchester, Indiana.

LAWN FENCE Made of Steel. Lasts a lifetime. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue free. KITSelman Brothers, Winona, Minn., Indiana.

If You Could Buy a Poultry Fence that would turn all stock and outlast the posts at the price of common nettings, wouldn't you do it? The PAGE is made of stronger wire, heavily galvanized. It lasts and is efficient. Write for descriptions. PAGE WOVEN WIRE FENCE CO., Box 7857, Adrian, Mich.

BOWSHER SWEEP MILLS Different from all others. Grind Corn with sickles or without. Kaffir is the head and all kinds small grain, 4 and 2 horse sizes. Geared 10 to 1 or 7 to 1. (Also make 7 sizes belt mills.) O. H. P. BOWSHER CO., SOUTH BEND, IND.

IWAN'S POST HOLE AUGER Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Three times the work accomplished with an IWAN Auger than with any other. Makes hole smoothly and quickly; empties easily; is very durable. Used by U. S. Gov't. 8, 4, 5, 6, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample at special price to introduce. Agents Wanted. Inquiries of dealers or write direct for particulars. IWAN BROS., Dept. No. 1, Streator, Ill.

\$10.00 Sweep Feed | \$14.00 Galvanized Grinder. We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

SCALES ALL STYLES LOWEST PRICES. 30 DAYS FREE TRIAL. CATALOGUE. AMERICAN SCALE CO., 304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

\$50.00 Split Hickory SPECIAL TOP BUGGY TO ORDER. 2-year guarantee. Sold on 30 days free trial. 100 points of superiority. Tell us what style vehicle you want. Send for 1906 catalogue free. The Ohio Carriage Mfg. Co. H. C. Phelps, Pres. Station 251 Cincinnati, Ohio.

Have baled about 4,000 tons of hay with my press the last four years and expense for repairs has been between \$1 and \$5 during that time. Fred Simpson, Gridley, Kans.

Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1084 Jefferson St., Topeka, Kansas.

EUREKA BOILER or STEAM FEED COOKER Savor half your corn or other feed. Saves labor in feeding. It will stave moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information. John Deere Plow Co., Denver, Kansas City, Mo.

Modern Silage Methods That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

**Twenty-five Bushels
of WHEAT
to the Acre**

**160 ACRE FARMS IN
WESTERN CANADA
FREE**
means a productive capacity
in dollars of over
\$16 per Acre

This on land, which has cost
the farmer nothing, but the
price of tilling it, tells its own
story. The



J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.

Mention this paper.

KIND FARMERS

Many of you need a Berry Patch

My 1906 Catalogue will tell you how to start it. Also, the price of plants, roses and other ornamentals for the yard.

B. F. SMITH, Drawer C, Lawrence, Kans.

**High Grade Paints
at Reasonable Prices**

We use good mineral and pure linseed oil. We are also distributors for Wing's Fire Proof Oil Paints. Write for descriptions and prices.

KANSAS CITY PAINT COMPANY

1803 West 39th St., Kansas City, Missouri

IT WON'T COST YOU ONE CENT.

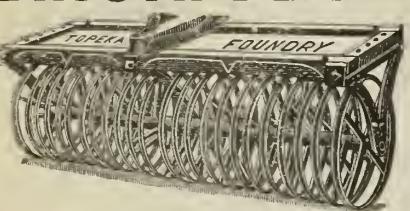
The Grain Belt Harrow Cart Pays For Itself in One Season.

Why wear yourself out dragging behind a harrow in the dust and over the clods,—when you can ride for nothing,—do more work in a day and better harrowing. Its all in the proposition we have to make you.

WRITE US TO-DAY FOR
OUR FREE BOOKLET.

Write
the

WATERLOO HARROW CO.,
953 Bridge St., Waterloo, Ia.

DROUTH DEFIER**NEVER LOSE A CROP**

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

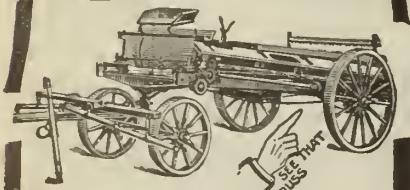
Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

**Before you buy that
Manure Spreader**

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader
has all these important features
and many others equally as important. Write to-day for free catalogue and special prices and terms.

APPLETON MANUFACTURING CO.,
19 Fargo Street, Batavia, Ill., U. S. A.

the time came it was cut, rain or shine, as both clover and alfalfa lose by becoming too hard at ripening. We took 3 poles, 6 to 8 feet long, and put them together in derrick-shape and put pegs in them sticking out to keep the hay from slipping and getting solid. We used to pile a half ton of clover or alfalfa on a rick and it would stand for two weeks and not rot as it would lay loose and the air would pass through it. After it stood a few days it could be put in the barn with safety and would not lose much in feeding qualities. When wanted for horses we would let it get riper than for cattle.

Now, in regard to Mr. Moore's inquiry about a floor for a stable. We tried flag-stone and tried plank, but they did not prove satisfactory; so we tore them up and made a dirt floor by laying old fence posts, or any old pieces of wood down and putting from 4 to 6 inches of dirt on it. That floor has been in the stable for 20 years and there is not a mud-hole in it and it has proved healthier for horses, and safer for cows.

JOHN B. BRAUN.

Sumner County.

Alfalfa—Disking Grass Land.

Land on which I grew oats last year, also land on which millet was grown, I had plowed early in the fall. Now I wish to ask: (1) Is it wise to sow alfalfa there this spring? If so, what preparation should be made of the soil? (2) Is it advisable to run the disk lightly over the old alfalfa to renew or stimulate better growth? (3) Would you advise disking native grass meadow for stimulation? J. J. HOSTUTLER.

Shawnee County.

The land on which you grew oats and millet last year and plowed early in the fall should be in good condition for seeding alfalfa in the spring. Many farmers prefer to seed in the fall because the weeds, such as crab-grass, are less apt to crowd out the alfalfa. On the other hand, I believe that moisture conditions are perhaps a little more apt to be favorable in the spring. At this station we have often secured good results by spring seeding. The seed-bed for alfalfa should be quite firm and should be finely pulverized on the surface. If you can prepare this seed-bed when the soil is in fairly good condition to work, I think that the spike-tooth harrow would be as good an implement as you can secure, and this should be used two or three times at least. If your soil is cloddy and the harrow does not break it up sufficiently a disk or acme harrow should be used. I would prefer to seed as early in the spring as is possible to prepare a suitable seed-bed.

Experiments conducted at this station and elsewhere indicate that disking of old stands of alfalfa results in a more vigorous growth and a better production. This should be done early in the spring, soon after the new growth starts, or directly after cutting.

It is not best to run the disk lightly over the ground. The best way to disk is to set the disk fairly straight and weight heavily so that the disk will cut into the ground as far as possible. If you do not weight the narrow, set it to disk as deep as possible. This may appear to destroy some plants, but on close examination you will find that very few plants in an old stand of alfalfa will be destroyed but many of the larger plants will be split at the crown so that they will ultimately occupy more ground and be equivalent to two plants. I would not advise the disking of a young stand of alfalfa.

Experiments conducted at this station have shown that practically no advantage is gained in disking native grasses.

V. M. SHOESMITH.

Roughage for Cows—Cow-Peas—Alfalfa.

I would be pleased to have your opinion as to the kind of roughage to raise for my milch cows. I know the value of alfalfa, but do not consider it practicable to sow, as I rent on one-year terms. I intend to try some cow-peas. What is the price of seed per bushel? How much seed should be sown per acre? Which is the best method of sowing and harvesting? If you have anything else to suggest in that line I would be pleased to have you answer through the columns of the KANSAS FARMER.

J. B. ZYBACK.

I have mailed copy of an article giving information regarding the growing of cow-peas. Cow-peas will make excellent roughage for milch cows, both as pasture and as hay, and the high nitrogen content of the hay makes it practically equivalent to alfalfa when the hay is properly cured and saved. The present price of seed, \$2.50 per bushel, makes cow-peas an unpopular crop to plant for forage when one has to buy the seed. A good plan to follow is to plant a few acres for the produc-

tion of seed; as, when the farmer grows his own seed he can well afford the peas for forage.

For forage purposes it is perhaps best to plant the peas in close drills on a well-prepared seed-bed, planting from the first to the middle of June, from 3 to 4 pecks of peas to an acre. Planted in this way the crop can be cut with a mower and put up for hay in much the same way alfalfa is. When the purpose is to produce a seed crop, the peas should be planted in rows 2½ to 3½ feet apart and cultivated. It will be necessary to pull the peas by hand, or harvest with a bean harvester; and to secure the best seed the peas should be thrashed by hand, unless the farmer has a bean thrasher. Thrashed with the ordinary separator the peas are badly split and broken, making them unfit for seed.

For annual forage we have found that sowed sorghum gives a larger production per acre than any other crop. Sowed Kafir-corn also makes good forage. A combination of corn and cow-peas planted in drill-rows makes very desirable forage. The crop may be harvested with the corn-binder and shocked the same as corn grown alone. If the cow-peas are planted with corn, plant late in the season sometime in June; about 1-3 to ½ corn and the balance cow-peas, in drill rows 3½ feet apart, and at such thickness in the row that the peas will average about 3 to 4 inches and the corn 12 to 24 inches apart. This makes a very desirable combination. We have been using such a combination crop to put in the silo during the past few seasons, but the crop could be just as successfully used for dry forage. Cow-peas may be sown with corn, Kafir-corn, or sorghum. Sow 3 to 4 pecks of cow-peas with ½ bushel corn, or with a peck of sorghum or Kafir-corn per acre. If too much of the corn or sorghum or Kafir-corn is sown with the peas, the rank growth of these crops will shade and dwarf the peas so that they will make little forage.

For winter and early spring pasture winter wheat or rye, or a combination of these grains will furnish an abundance of good feed. For early summer pasture sow barley and oats. Oats also make a good quality of hay, and millet is a good dry forage crop. All of these crops except the cow-peas when used as roughage, are deficient in protein, and unless you grow cow-peas or alfalfa for roughage you will almost necessarily have to supply the protein by feeding concentrates, rich in protein, in combination with roughage.

Although you are a renter I see no reason why you should not grow alfalfa. The owner of land, if he knows anything about agriculture, unless he is very short-sighted, will pay something to have part of his land seeded to alfalfa, and the renter need not miss a crop when the land is seeded down. Early fall seeding is often preferable to spring seeding, and by seeding alfalfa in the fall it is not necessary to miss a crop. Some early maturing crop may be grown the year the alfalfa is seeded, while with a good stand, fall-seeded alfalfa will produce a good crop the first season after seeding. The owner of land could well afford to furnish the alfalfa seed, in order to introduce alfalfa on his farm as a crop in rotation with other crops. Alfalfa is not only a profitable crop to grow in itself, but the alfalfa actually adds to the fertility of the soil, and much larger crops of corn and small grains may be grown by rotating with alfalfa than can be grown by continuous cropping with the grain crops.

A. M. TENNEYCK.

Russian Buckwheat.

I write to ask if you can give any information regarding Russian buckwheat, described as follows: Grain about the size of silver hull, or the common black buckwheat, or the grey buckwheat common to Ohio, but not so large as Japanese. The berry or grain is warty on all sides and not a pleasing grain to look at, and the flour made from it is of a greenish cast, but most excellent. My father used to raise it in Ohio and it was a success and also a drouth-resister. I have seen it in a dry season six or eight inches tall and full of seed. It has made a yield of eighty-four bushels per acre. I have been trying to secure seed for years, and any information you can give me regarding it will be thankfully received. I am willing to pay well for a little of the seed, as I believe it will do well in this State.

Father got his seed to start with, through the kindness of one Media Clement, who brought it from France when there on a visit. Please reply if you have any knowledge of the buck-

wheat. Do you know of any way to reach the seed-houses of either Russia or France, that we may obtain a start of the buckwheat?

AMOS HARTLEY.

Osage County.

I can give no information regarding Russian buckwheat which you describe in your letter. The North Dakota Experiment Station, Fargo, North Dakota, is growing several varieties of buckwheat which go under the name of Russian. You might write to the director of this experiment station.

Perhaps readers of the KANSAS FARMER may know of such a variety of buckwheat or of some other variety adapted for growing in Kansas.

A. M. TENNEYCK.

Alfalfa Questions.

The first of last September I sowed a four-acre field of alfalfa that was in very fine condition. The subsoil was well-settled and the top was as fine as an onion bed. The alfalfa came up nicely but in a few days there came a hard, dashing rain which washed the young alfalfa nearly all out. It seemed to sweep the surface-soil off. It was sowed again the last of September, but it did not come up, having been put in too deep. Now I want to sow the ground to alfalfa and am at a loss to know what to do. Shall I sow it this spring, or sow to cow-peas and oats and cut for hay. Would that leave the land in good condition to seed to alfalfa the last of next August? What kind of peas would be the best for this locality? I am located six miles northwest of Topeka on Soldier Creek. If I sow cow-peas and oats this spring, how early would you recommend them to be sown? The land in question is a sandy-loam bottom, sloping to the south, so I think it is a favorable spot for alfalfa. Please inform me at what time or stage of growth peas and oats should be cut for hay.

S. O. MARSHALL.

Shawnee County.

You would probably succeed in getting a good stand of alfalfa on the land described by sowing early this spring, say from the middle to the last of March. By sowing early there is less danger of the alfalfa being washed out or injured by hard, beating rains. I do not consider the danger from frost to early seeded alfalfa as great as the danger from heavy rains and hot weather to later seeded.

Your plan of planting some early crop which may be taken off for hay in order to prepare this land for seeding early next fall, is also a practicable one. The cow-peas, however, do not grow well with oats, since oats require early sowing while cow-peas must be planted rather late in the season.

At this station we usually plant cow-peas about the middle of June. Field-peas may be sown with oats early in the spring and the crop cut for hay, as you have described, when by disking and harrowing a good seed-bed for alfalfa may be prepared. Cow-peas make an excellent crop with which to precede fall feeding of alfalfa. The peas may be sown alone in close drills and cut for hay early enough so that a seed-bed for fall seeding of alfalfa may be prepared, or they may be sown with corn and the crop cut for hay and taken off the ground as described above. Oats seeded alone and cut for hay will leave the ground in good condition for disk-ing and harrowing, in preparation of the alfalfa seed-bed.

You probably sowed too late last fall to get a start of alfalfa. The last of August or first of September is a good time to sow, and I would not advise sowing later than September 15.

Field-peas with oats may be cut for hay about the time the oats are in the milk. The cow-peas may be cut for hay as soon as the first pods begin to turn yellow, or even earlier if it is desired to get the crop off the ground.

A. M. TENNEYCK.

Early-Sown Bromus Inermis.

I am going to sow quite a lot of bromegrass this spring, and wish to get the benefit of your observation and experience as to how early to sow it. I want to sow it as early as I dare to because we are bothered here a good deal with crab-grass. The ground was plowed and put in good condition and bromegrass sown on it last fall, but the seed proved to be worthless and not 5 per cent of it grew. The land is in fine condition now to reseed and harrow in and I wish to know how early I had better sow the grass. Is young bromegrass easily killed by freezing, and if so how hard a freezing will it stand? I have in the past sown it several times, but never sowed it very early, and I believe it should be sown as early as possible.

Ottawa County. G. E. BURNHAM.

Bromus inermis is not apt to be destroyed by freezing weather. I think it advisable to reseed the field described

as soon as the conditions are favorable for cultivating the ground and sowing the seed. I would risk sowing *Bromus inermis* now, providing the ground is ready for seeding. The grass-seed will not start until growing weather comes, and during the early spring before the ground is really warm enough to sprout grass-seed the seed seems to take little harm by being in the soil, and will start as soon as the conditions are right. I think we may take a lesson from nature in the seeding of grasses. Wild grasses are largely seeded late in the fall and during the winter and sprout in the spring as soon as the first warm days come. I am at present preparing a seedbed for sowing *Bromus inermis* and expect to seed by the first of March if weather conditions continue favorable. I would chance early spring seeding of grasses rather than late seeding. In seeding grass early there is the advantage, as you have suggested, that the grass will start ahead of the weeds and thus withstand unfavorable weather conditions later in the season, while younger, tenderer plants would be smothered by the thick growth of weeds, or destroyed by hot, dry weather. I am sending you a copy of press bulletin No. 129, giving information regarding the seeding of *Bromus inermis*.

A. M. TENNEYCK.

Alsike Clover.

Would you be kind enough to send me information in regard to "tame grasses?" What is your advice about sowing Alsike clover in Labette County?

S. H. BELKNAP.

Labette County.

I have mailed you copies of press bulletins Nos. 125 and 129, giving some information regarding seeding of English blue-grass and *Bromus inermis*. Either one of these grasses will seed well with clover in Labette County. You might use the Alsike clover on wet, bottom land with English blue-grass, but I would prefer to use red clover on upland or well-drained soil, also the *Bromus inermis* may be better adapted for the upland than English blue-grass. Timothy and clover would succeed well in your part of the State and the Alsike could be used with timothy on the wet land. Alsike is the wet-land clover.

You ought to continue to try sowing alfalfa alone and also in combination with grasses. I usually recommend sowing 3 or 4 pounds of clover, or 4 or 5 pounds of alfalfa with a little less than the ordinary amount of grass-seed required per acre. For pasture, sow a combination of English blue-grass and *Bromus inermis* with clover or alfalfa, sowing about 10 or 12 pounds each of the grasses per acre with the amount of clover or alfalfa named above. On wet land, redtop will succeed well in Labette County. It might be sown with English blue-grass on such land and some Alsike clover should be included. Timothy also does well on well-watered, bottom land.

A. M. TENNEYCK.

Alfalfa and *Bromus inermis* on Sod Land.

We have 160 acres of land, part hard and part soft, with a never-failing creek running through it from north to south. It is unbroken prairie. We expect to have part broken this year and I am desirous of getting some alfalfa started. In Bartelde & Co.'s catalogue they state that you recommend *Bromus inermis* to be sown with alfalfa for hog pasture. I want mine for hog pasture, and wish to ask you if you think part of the freshly broken, hard land, if disked and harrowed after plowing, and the seed inoculated with nitro-culture, would probably grow alfalfa and brome-grass successfully? And would it be better to drill in the seed or sow broadcast? Also, would the sandy land be better or as good as the hard land? Water is plentiful about 6 to 8 feet from the surface.

Would Turkestan alfalfa-seed be any better or as good as native? There is a depression or slough running back from the creek with some standing water and a marsh—perhaps ½ of an acre—with some salt or alkali in it. Is there anything that would make that land useful?

E. L. KELLOGG.

Harper County.

It will be almost impossible to prepare a good seed-bed for sowing alfalfa and grasses on the sod land which you describe. A much better seed-bed may be prepared on old land. Good, clean, corn ground, well-disked and harrowed, will make a good seed-bed, or early fall plowing which is well settled may be prepared for spring seeding by harrowing or by disking and harrowing. If you should decide to sow the alfalfa and grasses on the sod ground, the land should be thoroughly disked and harrowed until it is finely pulverized and in as firm condition as is possible. At this station we have had good suc-

GET READY FOR HARVEST Do IT Now.

The Way to Get Ready for Harvest

It is not enough to grow a good crop.

You have to harvest it, before you get your profits.

And your profits now depend very largely upon the way you harvest it.

A worn-out harvesting machine, or one that is not very good, even when new, may delay you long enough and waste enough grain, to turn your profits into loss.

It is a mighty poor policy to grow a good crop of grain and then let a part of it rot in the field.

It does not take a great deal of waste to eat up all your profits.

It may be only a spoonful of grain at a time but it counts.

Don't waste.

You can't afford it, and there is no necessity for it.

Get ready for a profitable harvest.

Do it now, while you have time.

Here is the way:

Go to an International Harvester Company of America dealer and ask him for a catalogue of the machine he handles.

He will be pleased to give you the book—and you will be pleased to get it.

He will be pleased to show you the machine—and you will be pleased to see it.

You will find the book extremely handsome, well illustrated with good pictures, interesting from start to finish and full of good, common sense about harvesting machines.

But more important, you will find a good harvesting machine.

That is what you are most interested in for that means dollars and cents to you.

We take it that you want a harvesting machine—that you can depend upon to see you through the harvest without break or delay;

—that will save you the greatest amount of time and labor and worry and trouble in the busy harvest days;

—that will harvest the grain you have grown with the least possible waste;

—that will not go to pieces after cutting a few hundred acres;

—that will be easy on your team;

—that you can get repairs for easily and quickly when you need them;

—that will, in short, give you thorough satisfaction in every way—doing for you everything that you can in reason expect a harvesting machine to do.

If that's what you want, all the more reason for looking up the agents of the International line.

You know the line—the six leading makes of harvesting and haying machines, used wherever grain and grass are grown:

Champion, Deering, McCormick, Milwaukee, Osborne, Plano.

Better harvesting and haying machines cannot be made.

As good harvesting and haying machines cannot be made without such facilities as the International Harvester Company possesses.

Such facilities are made possible only through the co-operation of the manufacturers of these several lines of machines.

It is co-operation which enables them to produce from forest and mine their own raw materials—and thus be independent of uncertain and fluctuating markets. Acting together, they own, control and operate their own coal and iron mines, their own coke-ovens and steel mills, their own lumber camps and saw mills. They not only get their raw materials of first quality, but what is of equal importance they get them when they want them.

It is co-operation which enables them to maintain experimental shops where every effort is made to perfect the principle and improve the design of the International Line.

It is the great demand for their machines which enables them to equip their factories with every possible facility for producing machines of the highest excellence—factories and workmen which could not by any possibility be maintained to supply a small demand.

It is this demand which enables them to maintain agencies almost everywhere where grain is grown—convenient to you—convenient to buy—convenient to secure repair parts.

The fact that so many farmers cannot be persuaded to buy any other,—the fact that so many farmers continue to buy them,—the fact that they are considered the standard wherever grain is grown in every part of the world is sufficient indication of their reputation and their reliability.

We don't believe that you will be willing to let harvest time approach without knowing more about the International line for 1906; we know you will be glad to get the catalogue. Call on the dealer at your very first opportunity.

Go to the dealer now, and get whichever catalogue you want.

If you don't know an International Dealer—write to us for the name and address of the one nearest you.

INTERNATIONAL HARVESTER CO., OF AMERICA.

(INCORPORATED)

CHICAGO, ILLINOIS.

International Line:—Binders, Reapers, Headers, Header-Binders, Corn Binders, Corn Shockers, Corn Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Balers, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons and Binder Twine.

cess in sowing alfalfa and *Bromus inermis* broadcast. The alfalfa may be sown with the drill, but the *Bromus inermis*, being a very light seed, is better sown broadcast rather than with the drill. I am unable to answer your question as to whether grass and alfalfa is likely to succeed better on the sandy than on the "hard" land. If you mean by hard land a compact or hard-pan subsoil, it is not likely that the alfalfa will start as well on such land as on the lighter soil, but if either the alfalfa or grass is once well started on the hard-pan land, it may succeed very well.

A combination of *Bromus inermis* and

alfalfa will make good pasture either for hogs or other live-stock. For a hog pasture, I would recommend to sow only 5 or 6 pounds of *Bromus inermis* with 8 or 10 pounds of alfalfa seed per acre. The alfalfa is really the more valuable forage plant, but by seeding the *Bromus inermis* thinly with alfalfa, the grass will gradually thicken up, producing a sod and probably making a more permanent pasture for hogs than will alfalfa alone. There will be no advantage in sowing the Turkestan alfalfa in your section of the State.

You might try sowing redtop and Alsike clover in the marshy ground which you describe. Redtop is an excellent

grass for wet land, and Alsike clover does best on moist or well watered land. Sow 8 or 10 pounds of redtop and 2 or 3 pounds of Alsike clover per acre.

A. M. TENNEYCK.

Explicit.

A gentleman was one day visiting a friend's house, and while strolling in the garden came across his little boy, and, speaking to him, said, "Well, my little man, how old are you?"

The child answered, "Five."

"And what are you going to be?"
And the unexpected reply was, "Six."
—Montreal Witness.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

March 13, 1906—40 Poland-China bred sows, and 45 Shorthorns. C. S. Nevius, Chiles, Ia.

March 13, 1906—Shorthorns and Poland-Chinas by C. S. Nevius, Chiles, Ia.

March 20-22, 1906—Combination sales of Shorthorns, Herefords, Aberdeen-Angus and Herefords at Kansas City; R. A. Ford, Manager, Lawson, Mo.

March 28, 1906—Shorthorns by Shawnee Breeders Association at Topeka State Fair Grounds, I. D. Graham, Secretary, Topeka, Kans.

April 13, 1906—James Stock Farm, Willard, Kans., trotting bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gifford, Waksfield, Kans.

May 1, 1906—Geo. Allis, Omaha, Neb., Shorthorns.

Is Cane Good For Brood Mares.

EDITOR KANSAS FARMER:—I would like to have some information in regard to brood mares aborting, as I have brood mares also a jact and a stallion. In last week's issue of the KANSAS FARMER I read about rations for brood mares. I agree with that statement except the cane for roughness, especially cane with seed on. I think it is the cause of so many mares aborting. I would like to hear from others in regard to this condition, the cause and the remedy.

G. B. TAYLOR.

Dickinson County.

This Pig Is Big For Its Age.

We are in the hog-feeding business, and among some purchased from my father is one of superior quality and size. At the age of 27 days it weighed 18 pounds and now at the age of 75 days it weighs 75 pounds, which we consider exceedingly large for that age. We have fed it up to the present date about 1½ gallons of skim-milk daily with all the corn it wanted and about 1-3 pound of our meat-meal. We fed meat-meal until it reached 50 pounds in weight. Our desire is to keep this pig one year as an experiment to see what we can make it weigh and would like to know if you can suggest any other feeds by which we can obtain better results. If you will kindly answer this in the columns of the KANSAS FARMER we will appreciate it very much.

TAYLOR & WOLFF.

Shawnee County.

The pig which you are feeding is certainly making unusually rapid growth which speaks well for the methods of feeding that you have followed. The chief thing to guard against is that your pig becomes overfat to the detriment of muscular strength and general vigor, as you wish to continue the feeding up to the age of one year. Sufficient exercise must be provided in order to keep the animal in perfect health for feeding period of that length and if it will not take exercise willingly, force it to do so by driving or by some other method. It will be a great advantage if you can supply some form of green feed during the summer, alfalfa being one of the best pastures for the purpose, or it may be cut and thrown to the pigs. Dwarf Essex rape may be sown, or cane, oats or other crops of that nature to supply green feed. If the skim-milk is available, it may be continued, also a small portion of the meat-meal. I think, however, it would be advisable to add a little bran and shorts to the ration. If the corn is ground the entire grain ration may be mixed together. You should keep the pigs in clean, sanitary quarters and it would be well to wash or dip it occasionally with some of the various dips recommended for the purpose.

G. C. WHEELER.

Kansas Live-Stock.

H. W. M'AFEE, TOPEKA, KANS., BEFORE THE NATIONAL LIVE-STOCK CONVENTION, DENVER, COLO.

In sending greetings and wishes of prosperity for the new year, Kansas also sends a record of accomplishments in agricultural and live-stock products that exceeds anything that she has heretofore done and places her in the front rank of all the States. Her agricultural products for the year 1905 amounted to \$168,989,859, or \$37,971,848 more than she produced in 1904. Her record for live-stock, including animals slaughtered and sold for slaughter, amounted for the year to \$239,649,964, or an excess of \$13,363,947 over the record of 1904. These figures, added to the production of mineral wealth for the year, show a grand total of near \$450,000,000 of created wealth for the twelve months ending December 31, 1905.

In the beginning of the year, the live-stock prospects were not bright. There were many uncertainties ahead of the cattle-breeder, and the swine-breeder was but little better off pros-

pectively. There has been a distinct improvement as the months rolled by, and the year closed with a condition of things that was fairly satisfactory to breeders and feeders. This satisfaction, however, did not grow out of the actual conditions, alone, but out of them coupled with the prospects. While the prices for breeding and market cattle have both been low, the prospect has been constantly brightening and the outlook is encouraging. These remarks apply more particularly to the beef breeds of cattle. The breeders of dairy cattle have a different story to tell. They have had a very prosperous year, and have promise of a bright future. It has been practically impossible for the breeders of pure-bred dairy stock, or even those breeding high grades, to meet the demands of the buyers. With the development of the dairy and creamery industry in Kansas has come a pronounced demand for milking breeds and strains of cattle, and those who are not willing to undertake the raising of the distinctively dairy-bred cattle, are taking hold of the dual-purpose breeds with great interest and energy. So great has been this interest in this type of cattle that the great American Shorthorn Breeders' Association has taken formal action looking toward the encouragement and development of milking strains of Shorthorns.

The year 1905 has been a great year for the horseman. There has been a brisk demand and good prices for good horses of the draft and coach type throughout the year and there is every promise for its continuance. The secretary of the Kansas Improved Stock Breeders' Association, who receives reports from each one of its thousand members located in different sections of the State, and who thus has exceptional facilities for learning the facts, is authority for the statement that there has been a greater demand in Kansas for these two types of horses than ever before in her history. Breeders of Standard-bred and trotting-bred horses also report a profitable business during the year with increasing demand for their output.

The past year has been the greatest one for swine-breeders in the history of our State. Better average prices have been realized for pure-bred Berkshires, Poland-Chinas, Duroc-Jerseys and O. I. C. S. than ever before. At no time have the auction sales of swine of these four popular breeds made such good averages as in the year just closed. With the extension of the corn belt westward, the development of her alfalfa area, and the utilization of Kafir-corn and other grains as swine feed, Kansas is rapidly becoming one of the foremost corn-producing States in the Union. The last report of the Kansas State Board of Agriculture shows a total of 2,133,555 head of hogs now in her alfalfa-fields and feed-lots. Kansas now ships more than 51 per cent of all the hogs that are received at the Kansas City market, which is the second largest live-stock market in the world. Yet, in spite of this fact, Kansas breeders and feeders of swine are large buyers of breeding stock from outside the State.

Years ago Kansas had some reputation as a sheep-growing State. Later she dispensed with her sheep flocks and seemed to prefer to raise dogs. At least the census returns show that Kansas has more dogs than she has sheep. However, our farmers are awakening to the value of sheep for Kansas and each year marks the increase in number of flocks in the State. There are no large breeders of sheep in Kansas and none who feed on an extensive scale. Kansas sheep breeders are largely buyers rather than sellers. Their surplus has been taken by their neighbors and practically none are shipped out of the State. The breeders seem to prefer the middle, wool type; and those now owning flocks, and those who are starting in the business, are very generally buyers of this type. More pure-bred sheep have been bought into the State during the year just closed than ever before. Operations in sheep-breeding have been confined almost entirely to the establishment of new flocks and the purchase of new blood for old ones.

In this connection it may be permissible to quote some statistics from the Breeder's Gazette of Chicago which has unrivaled facilities for securing such facts. The figures given herewith show the number of sales of pure-bred animals of the different breeds that have been held in the United States in the year 1905, and the same facts given for comparison for 1904. These figures show that the business is not going backward although they may not afford as much satisfaction as we would like to derive from them. They are given here because they indicate the general

condition of the country and show that of Kansas, as well.

COMPARATIVE AVERAGES BY YEARS.

	No. of sales	Number sold	Average Price
Shorthorn.	82	3,512	\$139.75
Hereford.	24	1,179	115.25
Aberdeen-Angus.	22	1,084	130.35
Galloway.	5	190	103.85
Polled Durham.	1	34	231.75
Red Poll.	3	94	109.80
			1904.
Shorthorn.	65	2,755	\$101.25
Hereford.	28	1,481	117.10
Aberdeen-Angus.	21	932	132.80
Galloway.	3	133	143.55
Polled Durham.	7	286	100.00
Red Poll.	1	48	70.00

It may be of interest to know that Kansas has done some big things along live-stock lines in the past. She now has the largest improved live-stock breeders' association of any State in the world. This association has 1,000 members, each of whom is a factor in the development of her agricultural and live-stock interests and exerts a political influence as well. This is the Kansas Improved Stock Breeders' Association.

Kansas has the largest county breeders' association in the world. This is the Marshall County Hereford Breeders' Association which numbers over sixty members, each of whom owns a herd of Hereford cattle.

Kansas has the largest herd of home-bred Aberdeen-Angus cattle in the world. This is the Sunflower herd at Hudson, and numbers about 350 head.

Kansas has the largest Hereford breeding establishment in the world. This is the famous Sunny Slope herd at Emporia, which numbers over 700 head, with an annual crop of about 500 calves.

Kansas has the largest Berkshire breeding establishment in the world. This is located at Burlington in Coffey County, and produces about 1,200 pigs each year.

Kansas has the largest herd of Galloway cattle in the world. This is located at Eureka in Greenwood County and numbers some 400 head of registered animals.

Kansas has the largest Percheron breeding establishment in the United States. This is the Whitewater Falls farm at Towanda, in Butler County. There are importers who have larger studs of Percherons but this statement does not include such.

Kansas has the oldest Percheron breeding establishment in the Louisiana Purchase. This is located at Wakefield in Clay County and includes two mares that won gold medals at St. Louis and that were never defeated in the show-ring.

Kansas raised the largest fleece ever shorn from a sheep's back. This weighed 52 pounds.

Kansas developed the highest-priced Percheron mare in the world. This was the imported-mare Regina, who was matured on Kansas alfalfa and sold at public auction for \$2,500.

Kansas has just held the largest poultry-show in the world, which includes 3,000 birds, exclusive of pet stock.

Kansas has the largest continuous alfalfa-field in the world. This is located in Butler County, and includes more than 2,500 acres.

Kansas has the largest creamery in the world. This is located at Topeka, and has more than 20,000 patrons with a daily capacity of 100,000 pounds of butter.

Kansas stands first in her production of salt, zinc and lead, and in the production of potatoes, of her orchards and other things, when the size of the plant is considered, though these need not be mentioned here.

Leading up to these big things and to others in the future, the most powerful influence perhaps has been the Agricultural College of Kansas which is the largest in the world, with a total enrollment of 1,600 students each year.

Kansas has the largest Experiment Station in the world. This is located at Hays and includes 4,500 acres, devoted exclusively to experiments in agriculture. It is a branch of the Agricultural College Experiment Station at Manhattan, and is under the control of its board of regents.

The few big things mentioned here are quoted from a paper recently presented at the meeting of the Improved Stock Breeders' Association and are given only as samples. Kansas, like Colorado, her sister on the West, is but a young State, and has only just begun her real active life. The possibilities of her agriculture and live-stock are unknown and even undreamed-of by her own citizens. Her oil and gas wells, her salt, coal, and other mineral wealth serve to attract early attention, just as they did in Colorado.

With the passing of the years, however, it is learned that her greatest source of wealth lies in her agricultural



CURES 50c. and \$1.00.

Swine Disease
and Hog Cholera

Send for Circular with Directions.
Dr. EARL S. SLOAN, 615 Albany St., Boston, Mass.



ON ALL LIVE STOCK
EASY & SAFE TO USE



BLUE
CATTLE
LOUSE
KRESO DIP
KILLS THIS
AND ALL OTHERS

RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write For
For Sale By All Druggists

PARKE, DAVIS & CO.

HOME OFFICES AND LABORATORIES:
DETROIT, MICH.

BRANCHES: NEW YORK, CHICAGO, ST. LOUIS, BOSTON,
BALTIMORE, NEW ORLEANS, KANSAS CITY, INDIANAPOLIS,
MINNEAPOLIS, MEMPHIS, U.S.A.; WALKERVILLE,
ONT.; MONTREAL, QUE.

Lump Jaw

The first remedy to cure Lump Jaw was
Fleming's Lump Jaw Cure
and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser

Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists,

212 UNION STOCK YARDS, CHICAGO, ILL.

SECURITY GALL CURE
POSITIVELY CURES
SORE SHOULDER
SORE NECKS OR BACKS ON
HORSES AND MULES
IT CURES THEM ANYWAY.
IN HARNESS, UNDER SADDLE OR IDLE
IF NOT SOLD IN YOUR TOWN WE WILL SEND YOU
FREE SAMPLE. If you send us the name of your dealer.
Put up in 25c, 50c and \$1.00 cans
MONEY BACK IF IT FAILS
SECURITY REMEDY CO.
MINNEAPOLIS MINN.

PINK EYE CURE
FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON,
Elmdale, Kansas.

and live-stock products, and we believe that the same is true of her great and vigorous sister State on the west, Colorado.

Stock Foods.

EDITOR KANSAS FARMER:—I would like to ask through the KANSAS FARMER whether it would be considered profitable to use any stock foods for pigs and hogs which have more alfalfa and mixed grasses than they can eat. They get a little milk and about one-half of a feed of corn. A SUBSCRIBER.

Dickinson County.

Stock foods are prepared and used for the purpose of promoting the health and growth of animals. Pigs situated as are those of our correspondent are likely to be healthy and thrifty. Many feeders, however, keep on hand and use some of the recognized stock foods and report good results. A letter to any advertiser of stock foods will bring a full discussion of the subject with abundant testimonials as to the benefits received.

Ward's Poland-China Sale.

J. J. Ward & Sons' Poland-China sale, held at Belleville, Tuesday, February 28, was a grand success. Thirty-four head brought \$1,783, an average of \$52.45 per head. Mr. Ward richly deserved the prices he received, for he is not only a breeder of high-grade swine, but when he enters a sale-ring to buy he pays good prices for what he wants. The following is a complete list of the purchases and prices paid at the sale:

Perfecto Expansioness	81305, J. M. Baifers, Abilene, Kans.	\$167.50
May Expansion	86351, Frank Michael, Summerville, Kans.	62.00
Mercedes	92729, McKeever & Dawson, Hubble, Neb.	34.00
Grandeur	D. Y. Wilson, Bellville, Kans.	85.00
Cupid	F. Farmer, Beatrice, Neb.	64.00
Cora	Jim Moiser, Rydal, Kans.	175.00
Keepsake	91759, Frank Dawley, Waldo, Kans.	74.00
Black Princess	Chas. Swierski, Bellville, Kans.	105.00
Isabella	J. N. Baker, Narka.	34.00
Roxy	McKeever & Dawson	27.50
Bettie	89947, J. M. Baier.	50.00
Correctress	J. M. Baier.	76.00
Guy's Pride	87350, Chas. Burandt.	36.00
Priceless Lady I	Jim Moiser.	32.00
Juno	H. B. Walters, Wayne.	41.00
Nora	94045, Geo. Elliott, Republic	25.00
Wide Out	J. B. Simpkins, De Witt, Neb.	40.00
Thick Set	J. B. Baifers.	35.00
Dutchy	W. C. Nichol, Rydal.	33.00
No. 23	C. E. Shaffer, Topeka.	38.00
Mignon	W. S. Farley, Bellville.	25.00
Marjorie	J. M. Baker.	45.00
Betsy	S. Merrifield, Agra.	30.00
Guv's Perfection	H. G. Farley, Bellville.	37.00
Graceful Perfection	W. H. Bulien, Bellville.	66.00
Mischiefous	Fanny 91760, F. Farmer.	71.00
Expansion	Lady 87016, J. B. Baifers.	61.00
Neva	Dick Ward, Bellville.	46.00
Black Model	Simpkins & Son, De Witt, Neb.	30.00
No. 33	Lew Bonner, Bellville.	32.00
Dandy Girl	W. C. Nichol.	29.00
Helen	H. C. Farley.	22.00
Mina	Lew Bonner.	30.00
Long Wench	92689, D. E. Leek, Agra, Kans.	34.00

A Good Percheron Sale.

Though Monday, February 26, dawned with a damp, cold snow-storm, it cleared up before noon, so that a good-sized crowd of horsemen and farmers gathered in the sale pavilion at South Omaha, Neb., to participate in the dispersion sale of Maple Grove Percheron stallions and mares, the property of Mark M. Coad, Fremont, Neb. The offering was almost entirely 2- and 3-year-olds, the young things left over at Mr. Coad's sale two years ago. The prices paid show a strong demand for good American-bred draft horses. The sale was under the management of Jno. S. Cooper, with Colonel Gallup on the block. Seventeen 2- and 3-year-old stallions sold for \$10,100, averaging \$594.15 and eleven mares brought \$3,860, an average of \$351, while the twenty-eight head averaged nearly \$500. The following is full list of sales:

Capt. Jack 29197, Fred Hoppie, Richland, Neb. \$450
Hamilton 32549, M. A. Salva, Winterset, Iowa. 435
Waterloo 32561, R. D. Striker, York, Neb. 650
Black Duke 32547, Scott Robinson, Papillion, Neb. 770
Guerilla Chief 32560, Wickham Bros., Council Bluffs. 375
Murat 32556, R. K. Bell, Toledo, Ia. 496
Blairmark 39558, T. J. White, Bellic Fouche, South Dakota. 675
Buckeye-Brilliant 52548, Geo. Long, Hooper, Neb. 925
Sultan 32599, Wm. Dunn, Weeping Water, Neb. 400
Chance 34898, Sam Graham, Oakland, Neb. 460
Nero 32885, Stageman Bros., Council Bluffs, Iowa. 825
Albion 35314, M. B. James, Aurora, Neb. 1000
Normandy 34882, E. L. Ackerman, Belle Fouche, South Dakota. 500
Archie 34897, G. J. Eckers, Denison, Iowa. 685
Almond 35317, W. P. Ashbaugh, Maynard, Iowa. 555
Capt. Jack 34886, A. W. Lydick, Tekamah, Neb. 505
Black Hawk 34887, Rae Bros., Arlington, Neb. 500

MARES.
Lady Beatrice 21591, E. K. Miller, Hampton, Neb. 600
Rosalie 18585, H. M. Stevens, Munden, Kans. 5225
Frances 34843, Jas. Guard, Silver City, Iowa. 275
Florence 34388, John Eason, Randolph, Neb. 245
Fountainhall 34894, G. M. Mark, Nebraska, Neb. 310
Madonna 34891, R. K. Bell. 275

Test Your Milk

We want you to put Dr. Hess Stock Food to a test. We know what it will do, but we want you to know it. We know that Dr. Hess Stock Food given with the regular ration will make more milk of better quality, and in sufficient quantity to leave a surprising margin above the extra cost. Just take two cows giving approximately the same pounds of milk; add to the ration of one the small doses of Dr. Hess Stock Food as prescribed. Let the other drag along in the same old way. Now we guarantee that

DR HESS STOCK FOOD

will positively produce a big profit. Besides making cows give more milk Dr. Hess Stock Food increases the digestive capacity of market stock, shortening the feeding period 30 days at the very least, besides curing and preventing many forms of stock disease. Stockmen must remember that it is not the amount of food consumed but the amount digested that produces the profit. Increasing the powers of digestion and assimilation according to the best medical authorities can only be produced by the action of bitter tonics, iron, and other medicinal ingredients such as are contained in Dr. Hess Stock Food, the prescription of Dr. Hess (M.D., D.V.S.). The ingredients of Dr. Hess Stock Food are recommended as by the Veterinary Colleges and the Farm Papers. Recognized as a medicinal tonic and laxative by our own Government, and sold on a written guarantee at

5¢ per pound in 100 lb. sacks; { Except In Canada
25 lb. pail \$1.60 and extreme
West and South.

A tablespoonful per day for the average hog. Less than a penny a day for horse, cow or steer.

If your dealer cannot supply you, we will.

Remember, that from the 1st to the 10th of each month, Dr. Hess will furnish veterinary advice and prescriptions free if you will mention this paper, state what stock you have, also what stock food you have fed, and enclose two cents for reply. In every package of Dr. Hess Stock Food there is a little yellow card that entitles you to this free service at any time.

Dr. Hess Stock Food free, if you mention this paper, state how much stock you have and what kind of stock food you have used.

DR. HESS & CLARK, Ashland, Ohio.
Also Manufacturers of Dr. Hess Poultry Pan-a-cea and Instant Louse Killer.

Instant Louse Killer Kills Lice

Gipsy Belle, John Eason..... 245
Empress 35315, John Eason..... 340
Mocking Bird 43595, Otto Uehling, Oakland, Neb..... 335
Fontanelle 43593, Otto Uehling..... 335
Princess of Jenico 43597, E. K. Miller..... 375

A Big Brown County Sale.

One of the most noted events of the season was the Hays & Gibbs Poland-China brood-sow sale at Hiawatha, Kans., on Saturday, February 17. It was active from start to finish, forty head making an average of \$30.50 per head. The top was paid by W. E. Smith, Baker, Kans., going at the sum of \$65.50. The next attractive one was Chief's Daughter, a spring gilt by Kansas Chief 37507, going to D. W. Evans, of Fairview, Kans., at \$65. Below is a list of those making \$25 per head or more.

0. W. H. Smith, Sabetha.....	\$30.00
1. W. E. Johnson, Sabetha.....	50.00
2. Thompson Bros., Marysville.....	40.00
3. C. F. Lewis, Sabetha.....	40.00
4. Thompson Bros.....	34.00
5. W. E. Smith, Baker.....	65.50
6. D. W. Evans, Fairview.....	65.00
7. Ed. Ruberd, Hiawatha.....	25.00
8. Bird Wise, Reserve.....	28.00
9. Don P. Dickinson, Everest.....	40.00
15. Walter Larkin, Hiawatha.....	25.00
19. Walter Larkin.....	29.00
20. Ben Day, Robinson.....	31.00
25. Bert Wise.....	34.00
26. Harry Rutter, Highland.....	34.50
27. Harry Rutter.....	26.00
36. Samuel Gannon, Robinson.....	26.50
37. M. W. Freeland, Everest.....	28.00
39. Jos. Gibbs, Hiawatha.....	50.00
40. Morris Fraley, Hiawatha.....	28.50
41. Don P. Dickinson.....	26.00
42. Morris Fraley.....	25.00
43. Ed. May, Willis.....	29.00
44. Morris Fraley.....	29.00
45. J. F. Trapp, Robinson.....	33.00
46. W. F. Reischick, Falls City, Neb.	38.00

It Will Pay You To Investigate

the merits of the

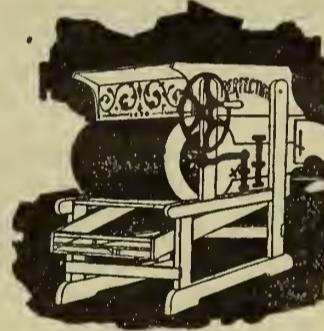
"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.

\$



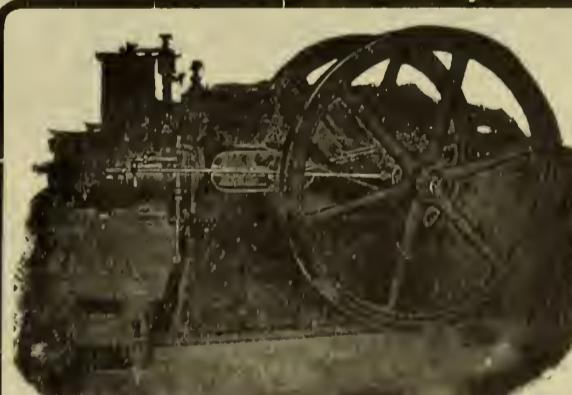
\$

This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305 Kansas Avenue, Topeka, Ks.



Dempster Mill Mfg. Co.

Manufacturers of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators



DEMPSSTER IMPROVED STEEL WIND MILL NO 7

DEMPSSTER
MILL MFG. CO.
ATRICE, NE.

ROLLER RIM GEARS
THEY STOP THE
WIND AND LESSEN THE WEAR
LATEST, STRONGEST, BEST
FACTORY BEATRICE, NE.

WHEN WRITING OUR ADVERTISERS MENTION THIS KANSAS FARMER

glebar 70707, a young bay stallion; and while he has no official record, he has made miles in 2:12½. He is almost a perfect individual and should be a bread-winner for the buyer. For catalogues address Hon. J. W. Creech, Ellington, Kans.

J. L. Miller & Son, of Muscotah, Kans., have four yearling Shorthorn bulls left, and any one needing this class of animals will do well to write them. Mr. Miller is one of the oldest breeders in the country and selects his stock with great care, always looking for the good individuals first. His stock ranks among the best in the State for size, shape, and quality and if you obtain one of these bulls you can not be dissatisfied. Read his advertisement in the Shorthorn columns of this paper and write him at once.

Chas. H. Butler, of Frankfort, Kans., has 25 Aberdeen-Angus bulls for sale. These animals are 12 months old and will weigh 750 pounds each. While they are not eligible for registration they are full bloods and excellent individuals. Mr. Butler has lived at Frankfort for twenty-one years and is one of the largest and best breeders in the country. He heads his herd with bulls from the best breeders in the country and always places individuality and quality above pedigrees, and any one buying of him will be sure of getting what he wants. Write him for particulars and mention the KANSAS FARMER.

Breeders and farmers of Southeastern Kansas will be interested in the sale of cattle and hogs at Elk City, March 17, 1906, at which time will be sold Hereford, Shorthorn and Angus cattle and Poland-China, Duroc and Berkshire hogs. Some excellent animals of each of these breeds will be sold by the consignors, as named in the advertisement. Our readers should write the manager of the sale, Samuel Drybread, for a catalogue and information pertaining to the sale. If you can not attend, John D. Snyder will handle bids sent in care of Mr. Drybread in your interest.

C. S. Nevius, at Chiles, Kans., will hold one of the great sales of the season on March 13. It has been said he is selling the best lot that has been sold since the Linwood dispersion. Our readers are familiar with the show-and-sale-record of this firm, and we predict a good attendance of all lovers of the best in Shorthorns, and there are not all the attractions. In the forenoon of the same day Mr. Nevius will hold his annual brood-sow sale. His herd is one of the most prolific and useful of the good herds of the State, and the sows offered in this sale are bred to one of the largest of all the large Expansion boars. Send at once for catalogue and arrange to attend this sale. Kindly mention KANSAS FARMER when writing.

C. S. Nevius will sell at Chiles, Kans., March 13, a great lot of Shorthorns and Poland-Chinas. The great show-herd Mr. Nevius had out last fall goes in this sale. One of the greatest 2-year-old bulls offered at auction in recent years will be Happy Knight, a son of a great sire, a great show bull and a proven sire himself at the earliest possible age. There are others of like breeding and a great lot of cows and heifers, many by Victor of Wildwood, used so successfully at Glenwood. All of breeding age, safe in calf to either Happy Knight or Prince Pavonia by imported Prince Lovely and out of imported Glendale Pavonia. This bull has for three years won at the Royal, besides winning the best prizes at other big shows. He is one of the best Scotch bulls in service in the West. The hog offering is of the large, useful type, nearly all bred to the Expansion boar, Designer, one of the extra-big kind. Separate catalogues have been issued and our readers should ask Mr. Nevius for one of whichever you are interested in, or both. Arrange to be present as this will be one of the big sale events of the eastern part of the State. Hogs will be sold in the forenoon and the cattle in the afternoon.

J. T. Staadt's Sale.

J. T. Staadt's sale of Duroc-Jerseys, at Ottawa, was not as well attended by the local people as the breeding and merit of the offering deserved. There was a fair number of outside breeders in attendance and the auctioneers and paper representatives had orders from several breeders. Practically all of the offering were April gilts and some of them were bred late. They made an average of \$25 each, which was only fair, considering the quality of the offering. Had they all been due to farrow in March and April and the local support been what it should be when an offering like this is placed at public appraisal, possibly a \$10 higher average would have been recorded. Mr. Staadt has the satisfaction of having had a number of the best breeders of the State represented in the bidding and they secured some very choice animals at very reasonable prices.

Canadian Prosperity.

Ottawa, Can., March 1.—The year which has just closed has been one most satisfactory and progressive with the financial institutions of Canada, and the business of the chartered banks reflects the unprecedented prosperity enjoyed throughout the country during the year 1905.

The increased demands made upon the banks of the Dominion by the commercial and agricultural expansion of the year were provided for without the monetary disturbances sometimes noted in the United States. Whatever opinions may be held as to the composition of the Canadian banking system, it is claimed that its flexible currency has many commendable features, and without which the last few months of the year must have produced a money stringency with probably disastrous results. It is felt that a wider field of credit in the Dominion is needed, and consequently the capital of many existing banking institutions has been

increased and several new banks are in progress of organization.

The chartered banks of Canada today enjoy the confidence of the general public to a greater extent than ever before. The total deposits of the people in these institutions last year were \$523,317,000, which shows an increase of over \$56,000,000 for the year. In actual money in bank probably no other country in the world, comparatively speaking, can make a better showing than Canada.

The total deposits of the Canadian people in the Government savings banks, in special savings institutions, and in the chartered banks alone, amounted last year to the enormous sum of \$609,454,000. This represents an average credit balance of over \$100 per head of the population of the Dominion, and it is stated that the only other country in the world that approaches this record is Denmark, where the average credit balance is about \$96.50 per capita. The above figures, however, do not comprehend moneys deposited with private bankers, loan companies, mortgage corporations and trust companies, or what is hoarded up in secret hiding places.

The annual report of the Dominion finance department, just issued to the public, shows a surplus in the Dominion treasury for the fiscal year of \$7,863,000, and refers to the remarkable increase in the public revenues during the year.

The Apiary

Early Spring Management of Bees.

EDITOR KANSAS FARMER:—The danger point with bees usually occurs during March, principally because at this time, colonies that have gone into the winter with scant provisions run out of stores. Perhaps our greatest losses are due to this. Bees begin to draw pretty heavily on their stores in March, for a prosperous colony now is breeding rapidly, and it should be, if it is going to be a paying one the following spring. Our best colonies, and the ones that give us the best returns in spring in the way of good surplus honey crops, are the ones that have on hand in store a good supply of sealed honey in their combs. Twenty pounds is none too much, and 30 pounds is better. It is always a difficult matter to feed bees during March, and no feeding or nursing will come near to meeting the full requirements.

The only method, and the one that will give us as good results as any, is to have a number of frames of sealed honey laid away for the express purpose of feeding the bees during the month of March. I have practiced feeding in all of its details, and I find that the cheapest, and most convenient method of keeping bees in the required amount of stores, is to thus provide frames of honey during the honey season, and instead of extracting them, put them carefully away for this express purpose. If they are not needed, they are by no means lost, and will not shrink in value for any purpose.

Liquid feeding can be done with good results after warm weather comes in, but not before, and candy feeding so much recommended for winter feeding, will simply keep the bees alive, but it can not answer for breeding up into strong colonies as will the natural stores.

Many warm days appear in March during which we can get the bees to partake of liquid feed, and on these days all goes well just as in spring; the queen begins laying eggs, the cluster of bees expand and cover double the territory otherwise occupied and the queen occupies all the cells thus covered, laying eggs in them, and the bees do their best at protecting the same. The eggs hatch and everything goes well, until a change of weather, and it turns cold, when the bees contract back to their original space on the combs and all the brood outside of this is exposed and lost, and the colony becomes discouraged, and in many cases diseased, and would have been better off if they had not been fed at all. Hence, I would say, to leave off liquid feeding until settled warm weather comes in spring, and then everything is safe, and feeding will be a success. If bees are starving, give them some candy to simply keep them alive until warm weather comes.

Bees that are wintered in cellars, of course, must be treated differently. To a colony that is absolutely out of food even in the cellar, I would give some candy, but no liquid food can be used in the cellar. It is very essential that during late winter, the bees in the cellar be kept absolutely quiet, for they naturally become uneasy at the approach of spring, and it is much the best to keep them in, if possible, until all cold weather is past. In some cases a colony will become so uneasy that it will interfere with other colonies near it, and be the means of arousing them, so that it is necessary to remove

it outside, and allow it to take a good cleansing flight, when it may be returned.

Spring management proper begins about the first of April. It is then that we can begin to get colonies strong. The first honey of the season, ordinarily, begins to make its appearance about this time, and its source is principally from fruit blossoms. If honey is coming in daily, everything will go along all right. The bees are breeding up just as fast as they can, and nothing we can do will add to their advancement (if the hives are all in proper shape, of course,) but if the flow of nectar stops from any cause, then all advancement stops with the bees. The queen will curtail her egg-deposits, and things will be at a standstill until a flow of honey begins again from some source. It is now that we want to fill in by feeding. We must watch closely these intervals between the different honey-flows on up to the time the honey harvest begins after which we turn our attention to reaping our harvest in the way of a heavy surplus crop. It is indeed very seldom that we fail to reap a rich reward for thus attending strictly to our business.

To get the best results, we must understand well the manipulation of hives, always keeping in view the fact that bees can not store honey unless they have a place to store it. A strong colony at the beginning of the honey season has need of at least a 25-pound surplus storage capacity to begin with, and in but a few days, a week or ten days at the least, they need double this capacity. If we put a ten-pound box on a colony of bees at the beginning of the honey harvest and let it there remain, we cannot expect over ten pounds of surplus honey. But by the proper management, we can have filled anywhere from 100 to 200 pounds of the finest of comb honey stored in the latest up-to-date packages that will bring the highest market price, and we become fully convinced that bees pay as well as anything else if properly managed.

A. H. DUFF.
Pawnee County.

The Government Distribution of Queens.

The Bureau of Apiculture of the U. S. Department of Agriculture, sends out the following circular: "It has been customary in the past for the Bureau of Entomology to distribute a limited number of queen bees of the more rare varieties to bee-keepers. This distribution is not intended to be general, since that would be impossible, and, to prevent misunderstanding, the following method, to be used in all future distributions, is announced.

"It is desired that some of the less common varieties which have proven so good may become more widely known among bee-keepers of the country, to take place, as far as possible, of the common black bees and of certain strains of Italian bees which seem to have deteriorated.

"Carniolan bees are very prolific, and are, at the same time, gentle; and there are records to show that as honey-gatherers they are excellent. The recently introduced Caucasian bees, which have attracted considerable attention, are the most gentle bees known at the present time; and records of honey production now coming in indicate that they are excellent. The Cyprian race, which has been criticised on account of its temper, ranks second to none in honey-production.

"Of these races, the Carniolans are sold in this country to some extent, and the Cypriots in less numbers. So far no queen breeder has offered Caucasian queens for sale, and there is, without doubt, an opportunity for a wide sale of these queens, as is evidenced by the requests which come to the Bureau of Entomology.

"The bureau can do more toward the wider introduction of these races by inducing reliable men to take up rearing of pure-bred queens, than by a more general distribution. It is not the purpose merely to give away queens, and the future distributions will be limited as follows:

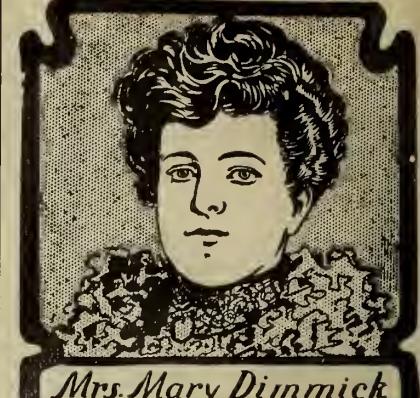
To any experienced queen-breeder who will guarantee to raise queens, and mate them purely in considerable numbers for general sale, the bureau will send, as far as the supply will allow, one high grade queen, purely mated and carefully tested. In addition several queens whose matings are not known will be sent for drone-production, since drones are not affected by the mating; all queens, however, will be from good stock, the number to depend on the supply on hand. The breeder making the request must give evidence of his ability to rear good queens; must agree to offer at least two hundred pure-bred queens a year

TWO OPEN LETTERS

IMPORTANT TO MARRIED WOMEN

Mrs. Mary Dimmick of Washington tells How Lydia E. Pinkham's Vegetable Compound Made Her Well.

It is with great pleasure we publish the following letters, as they convincingly prove the claim we have so many times made in our columns that Mrs.



Mrs. Mary Dimmick

Pinkham, of Lynn, Mass., is fully qualified to give helpful advice to sick women. Read Mrs. Dimmick's letters.

Her first letter:

Dear Mrs. Pinkham:

"I have been a sufferer for the past eight years with a trouble which first originated from painful periods—the pains were excruciating, with inflammation and ulceration of the female organs. The doctor says I must have an operation or I cannot live. I do not want to submit to an operation if I can possibly avoid it. Please help me."—Mrs. Mary Dimmick, Washington, D. C.

Her second letter:

Dear Mrs. Pinkham:

"You will remember my condition when I last wrote you, and that the doctor said I must have an operation or I could not live. I received your kind letter and followed your advice very carefully and am now entirely well. As my case was so serious it seems a miracle that I am cured. I know that I owe not only my health but my life to Lydia E. Pinkham's Vegetable Compound and to your advice. I can walk miles without an ache or a pain, and I wish every suffering woman would read this letter and realize what you can do for them."—Mrs. Mary Dimmick, 59th and East Capitol Streets, Washington, D. C.

How easy it was for Mrs. Dimmick to write to Mrs. Pinkham at Lynn, Mass., and how little it cost her—a two-cent stamp. Yet how valuable was the reply! As Mrs. Dimmick says—it saved her life.

Mrs. Pinkham has on file thousands of just such letters as the above, and offers ailing women helpful advice.

The Kansas State

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

**PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS**

Aberdeen-Angus Cattle

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

RUPTURE We have a new creation for the relief of rupture, surpassing any thing in this line ever invented, the price of which is less than for a common truss. We state a few plain facts in our free book containing valuable information that will interest you

IDEAL TRUSS CO., 2286 Auburn Ave., TOLEDO, OHIO.

SWEET POTATOES Yellow Nansemond, Yellow Jersey, White Brazilians, Southern Queen, for sale. If you buy of me you get direct from the grower. Correspondence solicited. W. T. BULKLEY, 319 Exposition Ave. Wichita, Kansas.

for sale to the general public, and must not ask for them an exorbitant price. It is the opinion of the Department that twenty per cent more than the current price for Italian queens would be fair. It will also be expected that in future years the breeders will do their utmost toward the improvement in honey-production, at the same time maintaining the purity of the races. The bureau will be glad to aid breeders of this class to its utmost ability, but will not aid in any way a breeder who offers for sale or sells crossed hybrids of the various races, except in the case of untested queens, and even in that case every possible effort should be made to get pure matings.

"After this distribution, all inquiries to the bureau will be answered by giving a list of reliable breeders, including those who have received stock from the government apiary; and the name of any breeder who knowingly sends out inferior stock will be dropped. It is not the purpose to interfere with the private business of the persons receiving these queens; but these precautions are taken to protect bee-keepers of the country.

"No applications for queens under other circumstances will be considered. All applications will be considered in order of their receipt.

"L. O. HOWARD, Entomologist,
U. S. Department of Agriculture,
Washington, D. C."

Corn-Growing Contest.

EDITOR KANSAS FARMER:—Corn is king of all the crops grown in Kansas. We desire to invite all farmers raising corn, and especially the boys between the ages of 12 and 18, to engage in the corn-growing contest of their county as outlined by Mr. Miller, our farmers' institute secretary; also to call attention to the State contest in January, 1907. Liberal premiums will be given for the best corn. We feel sure this boys' State contest, held in connection with the corn-breeders' contest, will be one of the largest and best agricultural meetings ever held in Kansas, and will be a start towards doubling the yield per acre. This means millions of dollars in the pockets of the farmers, as well as good times for all classes of people. The Kansas Corn-Breeders' Association heartily joins in making this State corn-growing contest for boys one of the means for better and more productive corn. Begin now for the contest.

C. E. HILDRETH,
President Corn-Breeders' Association,
Altamont, Kans.

Blowing or Breathing Wells.

The United States Geological Survey has on hand the investigation of curious phenomena known as "blowing" or "breathing" wells. In the course of collecting well records, the hydrologists of the survey have observed many wells that emit currents of air with more or less force, sometimes accompanied by a whistling sound which can be heard for a long distance. The best known examples of this type of well are found throughout the State of Nebraska. Blowing wells are also known to occur in Rapides Parish in Southern Louisiana. The force of the air current in one of the Louisiana wells is sufficient to keep a man's hat suspended above it. The cause of such phenomena is mainly due to changes in atmospheric pressure or to changes in temperature. During the progress of a low-barometer storm over these regions, the air is expelled from the blowing wells. With a rising barometer, the blowing becomes rapidly less until the current is finally reversed. Differences in the temperature of the surface air and the air in the soil also produce similar effects. When the interstices between the grains of sand, gravel, etc., in which the well is driven are filled with water, the phenomena of blowing is much less noticeable.

Taking Chances.

A small boy had been punished, and in consequence was feeling at enmity with all the world, but with his father in particular. When he came to say his prayers at night he gabbed through them at a high rate of speed, and while asking for the customary blessing on all the other members of the family, including the cat, he left out his offending parent.

His mother understood, but thought it best to "appeal to his better self."

"Harold," she said sweetly, "what about papa? You forgot, dear."

"Didn't. Don't want papa blessed."

"Why, Harold! when you love him so? Just think, dear, papa has gone downtown now, and how would you feel if he got lost or hurt because you hadn't prayed for him?"

This rather worked on the boy's

mind, and slowly he began to clamber out of bed, when, just as he got on his knees, he heard the familiar click of his father's key in the lock. "I guess I'll risk it," he announced, and quick as a wink jumped back into bed.—M. A. Dickorson, in Lippincott's.

A Santa Fe Good Roads Train.

The Great Santa Fe Railroad, which is distinctively a Kansas institution with Kansas interests at heart, has announced a special good-roads train for Eastern Kansas. This train will be equipped with abundance of illustrative apparatus and accompanied by the best and most experienced lecturers and demonstrators available.

Stops of one day each will be made at each place and actual road building will be done. Local communities will be asked to furnish the halls for the meetings and the necessary teams for the demonstrations. All other expenses will be borne by the railroad company who offer this Good Roads School on Wheels to the people free of cost.

The first day's session will be held at Olathe on March 26, and one day will be spent at each of the following named places: Wellsville, March 27; Ottawa, March 28; Iola, March 29; Girard, March 30; Erie, March 31; Coffeyville, April 2; Independence, April 3; Chanute, April 4; Lawrence, April 5; Emporia, April 6; Topeka, April 7.

Remember the dates and be present to hear D. Ward King and other lecturers on this vitally important subject. Also remember that the Santa Fe is bearing all the expense of this train in order that all these lectures may be free to the people.

BLOCKS OF TWO.

The regular subscription price of the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

Domestic Affliction.

A bright girl asked to be absent from school half a day on the plea that company was coming.

"It is my father's half-sister and her three boys," said the girl, anxiously, "and mother doesn't see how she can do without me, because those boys act deadfully."

The teacher referred her to the printed list of reasons which justified absence, and asked if her case came under any of them.

"Oh, yes, Miss Smith," said the girl, eagerly, "it comes under this head," and she pointed to the words, "Domestic affliction.—The Young Catholic Messenger."

The Inquisitive Girl.

New silver and table linen had been purchased in preparation for a dinner which the family had arranged to give to acquaintances to whom they desired to give an impression of prosperity. Little Mary, five years old, was cautioned particularly against making any reference to the new silver. The guests had not much more than got comfortably seated when the youngster piped up:

"Mother!"

"Yes, what is it?"

"Mother, what did you do with the old silver?"

Candid.

A city man complained bitterly of the conduct of his son. He related at length to an old friend all the young man's escapades.

"You should speak to him with firmness, and recall him to his duty," said the friend.

"But he pays not the least attention to what I say. He listens only to the advice of fools. I wish you would talk to him."

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railway. This engraving is 28 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheldley bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

THE MARK AND THE MOTTO

**"The Recollection of Quality
Remains Long After
The Price is Forgotten"**

Trade Mark Registered.



The difference in *worth* between a good tool and a poor one is always more than the difference in *cost*. Counting the time wasted in constant sharpening and the short life of inferior tools, a poor tool is really more expensive than a good one.

Whenever you need a tool of any kind, it will pay you to buy the Keen Kutter brand, and have the best. All kinds of tools are made under this name, and every kind represents the very highest quality of material, workmanship and finish.

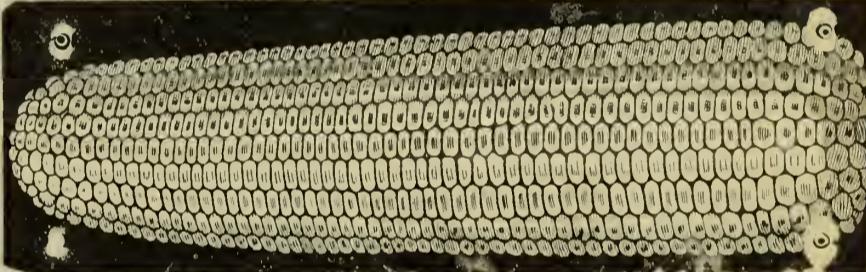
KEEN KUTTER

tools have been the standard of America for 36 years and are the only complete line of tools ever to receive an award at a great exposition—the Keen Kutter line being awarded the Grand Prize at the St. Louis Fair.

Following are some of the kinds of tools made under the Keen Kutter Brand: Axes, Adzes, Hammers, Hatchets, Chisels, Screw Drivers, Auger Bits, Files, Planes, Draw Knives, Saws, Tool Cabinets, Scythes, Hay Knives, Grass Hooks, Brush Hooks, Corn Knives, Trowels, Pruning Shears, Tinner's Snips, Scissors, Eye Hoes, Shears, Hair Clippers, Horse Shears, Razors, etc., and knives of all kinds.

If your dealer does not keep Keen Kutter Tools write us and learn where to get them. Send for Tool Booklet.

SIMMONS HARDWARE COMPANY,
St. Louis, U. S. A.
298 Broadway, New York.



Ratekin's Pride of Nishna Seed Corn

"Pride of Nishna" is a golden yellow, 16 to 24 rows; deep grain and small cob; matures in 95 to 100 days; of great vitality and strength to resist drouth and other unfavorable conditions, making from 60 to 100 bushels per acre. "Ratekin's Iowa Silver Mine," white, has made the greatest record for large yields of any white corn in the world—averaging 176 bushels per acre in seven states; full counterpart of Pride of Nishna.

Our Seed all grown by us from absolutely pure stock, especially for Seed purposes. All carefully selected, sorted, and butt and tip ends taken off and graded to uniform size. Seed shelled and graded or in the ear. Change your seed while you can get the best; grow bigger and better crops. Price, \$1.35, shelled, sacked on board cars here; 10 bu. or more, \$1.25. Our big Illustrated Catalog of all Farm and Garden Seeds mailed FREE if you mention this paper. Write for it today.

Address: RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

The Southwest Limited

Was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts. If you doubt the first fact compare the service of today with that before the Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago via the

Chicago, Milwaukee & St. Paul Railway

will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p.m.: Grand Avenue 6.07 p.m. Arrives Union Station, Chicago, 8.20 a.m.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street

KANSAS CITY

Horticulture

Early Potatoes as a Profitable Market Crop.

A. MUNGER, BEFORE MANHATTAN GRANGE NO. 748.

The first essential in raising early potatoes is to get some early seed and go to work. The next is to keep at it. Study them as you go. Judgment and experience are the best guides.

If you want to go anywhere, you can not get there by reading guide-boards; you must start and travel. Study your soil, for no two acres are exactly alike. Adjoining farms may be very different. Study your markets. They are as variable as the weather.

Early potatoes may or may not be a profitable crop, but if they are not, it is not generally their fault. Give them close attention from start to finish, and, mixed with ordinary farming, this is hard to do. If you can not do this, plant but few. If they are left to shift for themselves and finally hunted among weeds and marketed late, the verdict will be, "It wasn't much of a year for potatoes anyway." But if we are really going to give them care and raise potatoes, any good corn-ground is a good place, and corn is a good crop to precede them. Manure it well before planting the corn, then again before planting the potatoes. Well-rotted manure may be best, but fresh manure from a cow-stable or hog-pen is all right, but not from a horse-stable.

PLANT EARLY.

Put the ground in good order as early in spring as it is fit to work and the weather is pleasant, and plant at once. The seed will be sprouting in the cellar and you should turn that early energy into a crop. If you plant early in March, cover 3 or 4 inches deep, as the ground may freeze, which will do no harm if the seed is below the frost. If the potatoes come up and the tops get frozen, it will be but a few days until they will be up again and no harm done. If planting when danger of freezing is past, cover half as deep. Early Ohios have for years been the standard variety for this country. The Red River Triumph has been satisfactory with some. Professor Dickens has tested many varieties at the college. He gave me a list of those he thinks worth raising, and considering the number tried the list is short. They are, Early Ohio, Six Weeks and Eureka; Quick Lunch promised well but had only been tried one year. Farther down the list are Early Rose, Triumph, Carmen, and Rural New Yorker. Of eight varieties possibly worth raising, only three are recommended without some qualifications. This only includes early varieties.

TRY NEW KINDS CAUTIOUSLY.

For the main crop plant a standard, well-known variety, and try new kinds cautiously. For any one expecting to raise potatoes, it is a good plan to try a few of one or two promising kinds each spring. If they prove good, you can soon have seed enough for a crop from a very small start. If they are worthless, as most of them will be, you are not out much in time or money. Next year try another kind. One real success for a dozen trials will pay for the eleven failures if you try in a small way. Do not get excited when you read in seed-catalogues of wonderful "world-beaters" and "North Pole Potatoes, six weeks earlier than anything ever heard of before." In getting novelties seed comes high and disappointment makes a sore spot. Try a peck or a pound of these. I have known of 32 bushels being raised from one peck of seed and 6 bushels from one pound of seed. The one pound was put in a hot-bed, the sprouts broken off and set out like sweet potatoes, leaving the potato to sprout again; so there is no need of getting much seed of uncertain kinds. Seven to twelve bushels of seed will plant an acre. If you want to make the seed go as far as you can, cut small, one or two eyes on a piece. If you want your crop to come in the shortest possible time, plant large pieces. They make more vigorous sprouts and have more nourishment for the plant until it gets a root-system established. Plant one piece of seed in a place every 12 or 15 inches apart in the row.

CULTIVATE EARLY.

Before a plant shows above ground, begin cultivation by harrowing. A week later, if the ground is in good order, harrow again and repeat this every few days until the tops begin to be broken and torn by the harrow, then use something else. If the row

has been slightly ridged in covering the seed, a 2 by 4 scantling, fastened diagonally under the harrow at the first harrowing, will clean every young weed from the row, but this must be done before the plants are near enough through to be broken. It also levels the ground, a condition in which it should be kept as nearly as possible throughout the season. After the harrow, the cultivator that will keep the ground nearest level and most thoroughly pulverized is best. Several small shovels are better than a few large ones. The common iron-framed, five-toothed, one-horse cultivator is the best thing I ever used. Spring-toothed weeder are good and take a wider strip. The five-toothed cultivator can be made still better by fastening behind it a piece of 2 by 4 scantling about two feet long, with 60-penny wire spikes driven through it. Drive the spikes 2 inches apart, tie this behind the cultivator by a light chain or rope at each end, so it will drag close behind the cultivator. Spikes will need to stick through 2 or 3 inches. To keep this little harrow from tipping forward at the top, weight the back of it down with some old iron spiked or bolted on until it sets up straight. This is a good pulverizer and leveler for cultivating any other truck.

Whatever you cultivate with, use it often. If you raise early potatoes, you want them early; the price sometimes drops 10 cents per bushel in a day. The thing is to get to market while the price is up; therefore, use the means that will stimulate rapid growth, and frequent cultivation is one of the very best means to this end.

Do not cultivate when the ground is too wet, but just as soon as it is in fit condition after every rain; this will do more good than at any other time. Once a week is none too often, and a week after the last cultivating you want to be digging the crop. If weeds begin to show above the potato tops in the row, hoe them out.

DIGGING.

A lister is a fairly good potato-digger but is wasteful of the crop, and early ones are too valuable to waste. Edwin Taylor, who is authority on potatoes, uses the digger with rods reaching back and upwards from a shovel in front. My experience with this was variable. On sod ground or where potatoes grew in a bunch near the surface, they gave good satisfaction; but in deep, loose soil where the potatoes grew deep, the potatoes were not brought to the top, but hopelessly mixed with the loose dirt. In such a place, a plow or lister is better, perhaps a spading fork better still if you can get the force to use it.

Use marketable-sized potatoes for seed, as a rule, but the small ones raised from large seed, are good for seed the next year—if you stop at that and do not use small seed too long. A good way is to plant part of the crop each year with good-sized seed, and plant the balance with all sizes as they come. Save the seed for the next year where the large ones were planted, and save none where the mixed seed was planted. This is very little trouble and it will keep up the grade of potatoes. I have sometimes raised more bushels of potatoes to the acre where small seed was planted than where large seed was planted, but the grade was not so good. An acre was planted one spring with Early Ohios, large seed. Those the size of an egg were cut in two pieces—smaller ones not cut at all, and larger ones left in good-sized pieces. Fifteen bushels of seed was used on one acre. Strong, thrifty plants soon came up and continued vigorous through the season. The crop matured early. Half of that acre was dug early and sold for \$62.50 to \$125 per acre. Large seed, planted early, and good cultivation on manured ground account for their having done extra well. But we need not despise the day of small potatoes, for they make very good seed where extra earliness is not so important, and in this way often make a good crop for home or late market; but for extra early use nothing but large seed.

If help is not too scarce and high, it will pay to dig early potatoes by hand, but generally this can not be done; so plows, listers and potato-diggers are tried with various degrees of success and wastefulness; but whatever you use, plow and harrow the ground afterwards; and if it is plowed in narrow furrows, you will find many potatoes. In this way I remember getting an additional \$30 worth off of seven acres in a few days one season, and the ground was put in the finest condition for some other crop.

FORAGE CROPS FOLLOW.

After early potatoes, cow-peas, sor-

ghum, Kafir-corn or ordinary field corn can be raised. A Nebraska potato-raiser makes a practice of raising good crops of some early-maturing kind of corn in this way, and gets better crops than average farmers do who raise no potatoes before the corn. This, of course, takes heavy manuring. If no crop is planted immediately after digging the potatoes, the ground is in condition for wheat or alfalfa in the fall.

If the potatoes are not to be dug until late, they need something to shade the ground. Weeds will take care of this if you give them a chance, but if sorghum-seed is sown broadcast just before the last cultivation, it is as easy to have a crop of hay as a crop of weeds. The hay will be as good as if no potatoes were there and it keeps the ground clean.

BIRDS AND PARIS GREEN FOR BUGS.

If bugs get troublesome, use Paris green. If there are but few bugs, they may be thinned by fastening a brush on the cultivator, so it brushes the row vigorously in front of the shovels. The soft, young bugs get buried and mashed and it helps to thin them. This does not hurt the old ones and if they are very numerous, poison will need to be used. Spraying is the standard way, but mixing Paris green with ten times its bulk of flour and dusting it on in the morning when the dew is on to make a paste, is a good way for a few acres or less. Use rye flour if you can get it, as it makes a better paste. This can be put on rapidly with a small hand-sieve, giving it a jerk to shake out the desired amount as you pass along the row. If you do not get over the whole patch in one morning, do not be impatient, the bugs will wait for you. This will not wash off so easily as when sprayed on. In a 100-acre field of potatoes, a horse-power spray cart can perhaps be used, taking two or four rows as fast as a horse can walk.

Quails will eat Colorado potato bugs, as well as most other injurious insects. Farmers should not allow a quail to be even disturbed, to say nothing of shooting them. They are birds that work for nothing and board themselves. The same may be said of most birds. Of the farmers who shoot quails we can only say, "Father forgive them, they know not what they do."

MARKET EARLY.

The market for early potatoes is very variable. If you have only a few, they can be sold in the home market, if you can get there before the "other fellow." But in large quantities they must be shipped by the grower or some one else; and here comes in the chapter about commission, freight, condemned rotten potatoes at destination thrown into the dump, and freight bills sent back to be paid by the shipper. If you ship, do not let a small or spoiled potato get into the car. If you sell to some one else to ship, treat him as you would like to be treated. Handle them carefully and rapidly; do not pour them over the edge of a wagon-bed onto the bottom of it. Just that may make a difference between sound and rotten potatoes at their destination. In five days from the time they come out of the ground, they ought to be steaming on the dinner-tables in Michigan and Chicago.

To sum it up—plant as early as possible; cultivate frequently; dig as soon as they will do; and sell wherever the market promises best.



An Easy Way to Get an Evergreen Windbreak.

Twelve "Blizzard Belt" Evergreens free. This is the offer as made to our readers by The Gardner Nursery Company, Osage, Iowa. If set eight feet apart in row, these twelve trees would in a few years' time make a perfect windbreak 100 feet long. If not wanted for a windbreak, they are of suitable varieties for setting on the lawn, in the cemetery or along the street. This company grows all kinds of hardy nursery stock, and has made a specialty of growing hardy evergreens for nearly forty years; and to prove their hardness and quality they offer to send 12 fine pines and spruces, 2 years old, entirely free to our readers who apply for them at once. Mailing expense is 5 cents which you can send or not as you please. A postal will bring them.

This company's catalogue contains 42 colored plates and a mine of valuable information for fruit-growers. It is easily worth \$1 to any one interested in fruits, ornamentals, etc., but is sent entirely free to all property-owners.

Write to-day and have your order entered for the free evergreens, addressing your letter to The Gardner Nursery Company, Evergreen Dept., Box 740, Osage, Iowa.

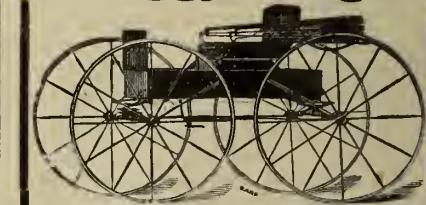
STEVENS FIRE ARMS

Accuracy is not...
more chance any...
more than the high
scores of a crack shot.
The accuracy of the Stevens
barrel is the result of best
material, best workmanship
and careful testing at every
point.

Our Catalogue of Firearms
will interest you. 140 pages,
describing different styles,
how to select a rifle, talk on am-
munition, and much other
valuable information. Send
4 cents in stamps to cover
postage, and we will send it
free. If your dealer cannot
supply you, write to us.

J. Stevens Arms & Tool Co.
125 High Street
Chicopee Falls, Mass., U.S.A.

A Buggy Bargain



Buy it on a Plan so You Know You Have a Bargain
WE PAY THE FREIGHT.

You deal with the factory. 30 Days Trial.
You can test its quality for yourself and see that its price is about half the local dealers' price.

GUARANTEED TWO YEARS

We insure you against any loss if a flaw develops in either workmanship or material within that time. Do you want a vehicle of that kind sold that way? Anything you need in vehicle line on just that plan. Send today for manufacturers' catalog.

The Apex Mfg. Co., Bloomington, Ill.

EASTER LILY FOR EASTER SUNDAY
Send 10 Cents
Will send you 1 Easter Lily Bulb, 1 Tuberose, 1 Gladiolus, 1 Cinnamon vine, 1 Oxalis also 10 different kinds of fresh, finest grown seeds, including Pansies, Petunias, Phlox, Aster, Stocks, Sweet Peas, Cosmos, Balsams, Nasturtiums, Morning-Glories, Verbenas, Portulaca. This fine collection of seeds and bulbs for 10c. in Silver or 2c. Stamps.

American Seed Co.
Malden, Mass.

1900 Washer FREE!

Any worthy person can have a "1900" Gravity Washer free to try four weeks just by writing for it. We pay the freight and take all risk. You don't risk a penny. Test it four weeks at our expense. If you like the Washer, keep it on the "1900" plan, which we will explain to you. If you don't like it return it at our expense, so you are not owing out. Washes a tub full of dirty clothes clean in Six Minutes. Get it FREE by mailing a postcard to "1900" WASHER CO., No. 5529 HENRY STREET, BINGHAMTON, N. Y., or 335 Yonge Street, Toronto, Can.

THE SCIENTIFIC FARMER

Will enable you to increase your yields per acre by applying Scientific Knowledge to your farm. It is devoted to the

CAMPBELL SYSTEM

And is edited by men who know. Subscription price \$1.00 per year, including Campbell's Manual of Soil Culture. Sample copy, 10 cents.

THE SCIENTIFIC FARMER, 1715 California St., Denver, Colo.

Combination Thief - Proof Whip and Walking Stick

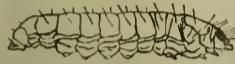
The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

The Apiary

The Bee-Moth and Its Wax-Worm.
(*Galleria mellonella*, Linnaeus.)
Elbert S. Tucker, Museum Assistant in Systematic Entomology, University of Kansas, Lawrence.

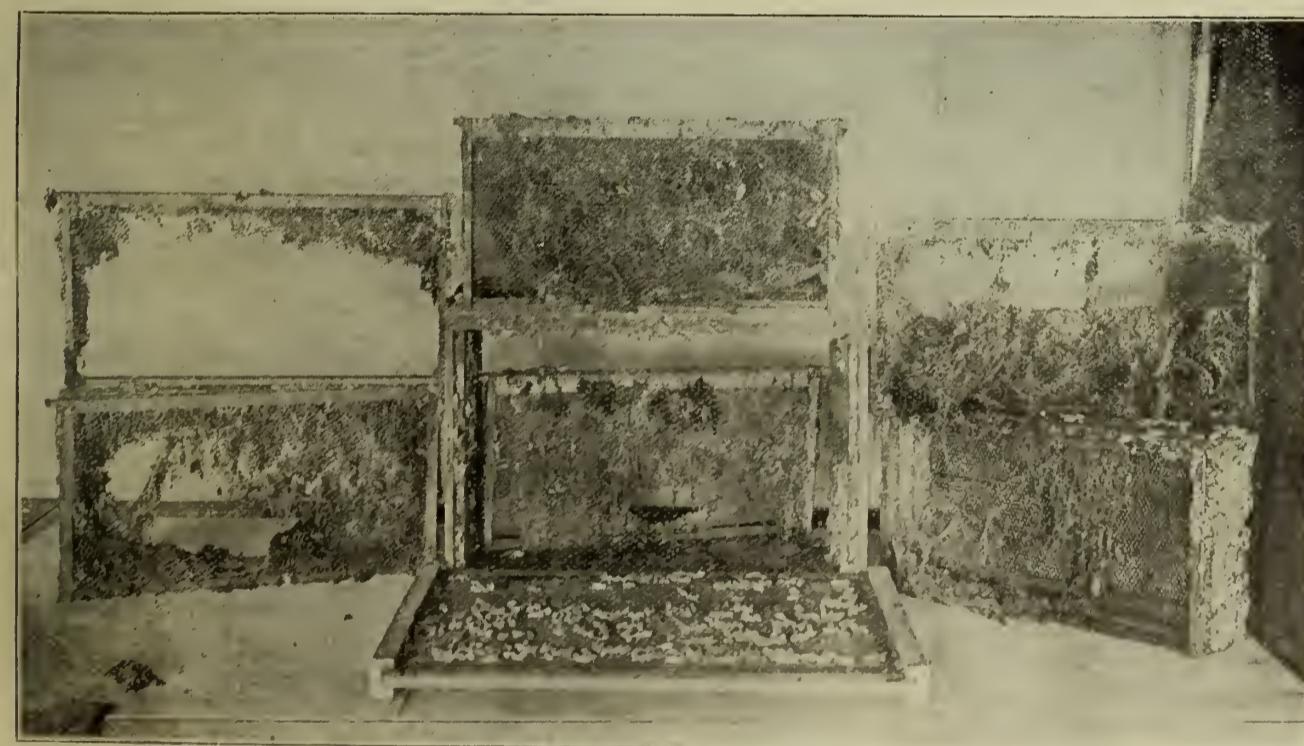
Bee-moths, sometimes called "wax-moths" or "beeswax-moths," are the slippery-sealed and stealthy parents of wax-worms. They fly from hive to hive at night, seeking entrance as a thief that tries to take advantage of the bees at a time of justly deserved rest, yet being obliged to act very quickly, since the bees are always ready to sting and tear their enemy to pieces with fury. Thus the mother moth risks her life whenever attempting to lay her eggs in a vigorous colony of bees. The eggs hatch out into very small worms or larvae which grow rapidly as they feed on the wax and stored pollen, ruining honey and brood cells by eating out galleries under protection of web lining which each one constructs as fast as it progresses along the comb, while the bees working there look on in dismay. When free from molestation of bees, as with stored or tenantless combs, the worms spin mazes of webs reaching from one comb to another, if



Wax-worm, natural size. (Drawn from "The A B C of Bee Culture.")

close together, and then feed voraciously under this screen. Their bodies are pale yellow in color and they grow to a little over an inch in length. At this period, they crawl into recesses of the hive and there each one envelopes itself by spinning a tough, white cocoon, which is proof against the stings of bees, and within, it undergoes transformation, finally emerging as a moth that becomes a parent of another generation of worms.

Two very badly infested hives were brought to the department of systematic entomology of the University of Kansas, on September 27, and the privilege of inspection was thus afforded that disclosed the effects of severest ravages wrought to the combs by wax-worms.



Bee-hive opened up with comb section

The accompanying photograph shows one of the hives opened up with comb sections displaying in a striking manner the extent of devastation that can be caused by these despoilers. Judging from the appearance of the remnants, but little work has been done by bees on the combs of either hive, as the foundations were only slightly built out into cells. When combs are left in a hive after bees have died, the robbers will multiply unchecked and become a menace to a whole apiary. For the greater part, only ragged portions of combs remained in the frames and these were riddled with galleries and overspread with filthy webs; the other frames contained nothing more than mats of blackened and tangled webs hanging to the wires.

Home Departments

CONDUCTED BY RUTH COWGILL.

Cooperation.

"Help one another," the snowflakes said,
As they cuddled down in their fleecy bed;
"One of us here would not be felt;
One of us here would quickly melt;
But I'll help you and you'll help me,
And then what a big, white drift we'll see."

"Help one another," the maple spray Said to its fellow leaves one day;
"The sun would wither me here alone,
Long enough 'ere the day is gone;
But I'll help you and you'll help me,
And then what a splendid shade there'll be!"

"Help one another," the dewdrop cried,
Seeing another drop close by its side;
"This warm south breeze would drive
me away,
And I should be gone 'ere noon to-day;
But I'll help you and you'll help me,
And we'll make a brook and run to the sea."

"Help one another," a grain of sand Said to another grain just at hand;
"The wind may carry me over the sea,
And then, oh, what will become of me?
But come, my brother, give me your hand;
We'll build a mountain and there we'll stand."

—Selected.

Possibilities on the Farm.

We are prone to go along the road of life with head and eyes down, failing to see the beauties and benefits of everyday life. In a talk to farmers—the time, place, and occasion of no importance—Mrs. Noble Prentiss spoke along this line of thought as follows:

"Among the finest of the innumerable splendid products of the Kansas farms, are the boys and girls that are growing up about us. And while you are educating your children in the free public schools, don't neglect the very important duty of teaching them to appreciate the magnificent beauty of the Kansas landscape; to understand what healthful benefits there are in this free Kansas ozone. Teach your children to see beauty in everything about them, for this brings health to mind and body. God has blessed us with a wonderful country and I advocate strongly that you should urge your children to stay in the country and not go into the city. Young people do not begin to realize the benefits of staying where they are well off, and they certainly are well off on these Kansas farms. There is where they can make the money, and it is not as it used to be before we had our telephones and our rural delivery. I want to congratulate you farmers on your beautiful country homes with the air of wealth and prosperity about them. You farmers of to-day are building fine modern homes, with bath, furnaces, telephones, acetylene lights and every modern convenience. And with the daily papers, monthly magazines, and mail delivered at your doors, and the telephones, it makes the very city seem to be set nearer and the former loneliness has been done away with. The farmers of this age have the sense to spend their dollars in travel. They make hay while the sun shines, then when the winter months come they take their families and go to California or some other equally delightful winter resort where they can see the sights and become broadened.

"I tell you another thing of which I am a strong advocate, and that is civic improvement in the country. Make your dooryards as attractive as possible and pride yourselves on the beauty of the country roads. I urge you to introduce domestic science into your consolidated schools. The girls will learn to do housework in such a dainty way that all of the drudgery will be removed and it will become an actual pleasure. I have recently visited the schools in Parsons, where they have a domestic science department and I watched the girls making biscuits and they never touched their hands to the dough. I just said to them: 'Why, girls, if I were doing that I'd have dough all over me.' They just laughed for that was the only way they knew how to do such work. The children are taught everything in these domestic schools and I think they are among the finest things of the age."

Art and Life.

ALICE E. WELLS, PRINCETON, KANS.

From the days of "mud-pies" to the close of earthly existence, the desire to "make something" has had a controlling influence over individual life. Looking backward to those same mud-pies, followed by clay marbles, bricks, and at last a veritable, molded-clay stove, carefully dried and tem-

pered with a "truly" fire, surreptitiously built, whereby to bake the pies, dry the bricks, marbles, and sculptured human forms, all of which led to deeds of greater valor, the question arises, do children have as good a time now as we used to? At eventide that group of nine gathered in the darkening parlor, and one after another, in turn, "made up stories," some of them "continued" into regular serials. Years have glided by and scattered members of the group continue to "make things" each according to his bent.

What influence on life has art? Much every way. The instinct for creation is a God-given one and, like all faculties bestowed, is a blessing if cultivated, a curse if neglected. Every material blessing enjoyed to-day is the emanation of somebody's fertile brain in practical demonstration, and is a silent historical record of the times in which it was created. The difference between civilization and barbarism of ancient nations is more clearly seen by the works of their hands than by written history. How little the Greeks thought or realized, ages before Christ, when they were carefully chiseling, mortising and putting in place huge blocks of marble, true in every detail—the length of pillar, just so many times the diameter of the base, every angle, groove and joint exactly adjusted—that thousands of years afterward, we, in making a study of Greek art, should find lessons of truth, beauty, purity, and strength from the works of their hands. To-day, in our homes the influence of what we are making is greater than the words from our lips, and exists for all time. Nothing is more artistic than straight lines, exact angles, and true curves. These principles may be applied to most of our work with surprising artistic effect. Simplicity of detail is helpful, too, in the arrangement of one's home surroundings, and is more restful to the eye and mind than elaborate display. The reflex influence on character-building is a sure accompaniment to careful handiwork. Concentration of mind on making true things, leads to careful speech, true thoughts, pure lives, and kindly care of friends. Then, too, life itself means so much more to those who look for and find or create the true, the beautiful, the artistic, if you please, in immediate environment.

Some Flowers of Easy Culture.

JEANETTE BROWN.

Sometimes the farmer's wife of artistic tastes finds the cultivation of flowers the "one straw that breaks the camel's back" in her busy life; yet, as summer draws to a close, she feels there has been a lack somewhere if there has been no bed or box of fragrant bloom to cheer her through the long, hot months.

The four flowers I have in mind which are peculiarly adapted to Kansas sun and soil, are the portulaca, the dwarf nasturtium, the coreopsis and the petunia. One good bed of any one of these will add the grace of refinement to any dooryard.

One of the most beautiful flower beds I ever saw—and by that I mean to include the parks of cities—was in Humboldt, Kans. It was circular, eight feet across, and outlined and protected from grass by a row of old bricks. The flowers were portulaca, and they covered the ground completely, and were a blaze of bloom through a long and drouthy summer. I was told that it was a bed of several years' standing, seeded itself, and represented an outlay of one dime.

The nasturtium is of the easiest cultivation. Like the portulaca it requires a sandy soil, not very rich. The flowers, which in the improved varieties, range through shades of red and yellow, must be gathered or the bloom will cease. It is highly decorative when the plants touch but do not crowd, and the blossoms are invaluable for table bouquets.

I have not words to express the sweetness and gratitude of the petunia. Given a space in the dooryard it will bloom there year after year, its dewy freshness and fragrance cheering the care-worn soul. The petunia is a favorite in Topeka, and has great spaces allotted it in the Capitol grounds.

My experience in growing the coreopsis is very happy. I had a small bed of the velvet brown variety; a few feet distant was a hedge of roses and the seed of the coreopsis blew and lodged

Home Made

Have your cake, muffins, and tea biscuit home-made. They will be fresher, cleaner, more tasty and wholesome.

Royal Baking Powder helps the housewife to produce at home, quickly and economically, fine and tasty cake, the raised hot-biscuit, puddings, the frosted layer-cake, crisp cookies, crullers, crusts and muffins, with which the ready-made food found at the bake-shop or grocery does not compare.

Royal is the greatest of bake-day helps.

ROYAL BAKING POWDER CO., NEW YORK.



Cheap Rate to California.

Californians raise gold—they don't mine much now. An easier way has been found than that! It is now obtained by farming. The alchemy of nature converts the oranges, lemons, olives, grapes, wheat, alfalfa and other products of the soil into good clothes, comfortable residences, and assuring bank accounts. 'Tis being done every day in California. Wouldn't it pay you to inquire into this? Better yet, why not go there?

Only \$25.00

From Topeka to almost all points in California and to many places in Arizona. Liberal stop-over privileges.

On sale daily, February 15 to April 7, 1906. Tourist sleepers daily on fast trains. Harvey meals.

For particulars, apply to

T. L. KING, C. P. & T. A.,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.

along the hedge, where, the next summer, they made such a display of bloom that passers-by looked incredulous when told it was the plain garden coreopsis.

There is a great reaction in favor of garden flowers. For awhile the pernicious idea was entertained that bedding plants alone were desirable; now, in the most admired gardens, the "cottage flowers," as they are called in England, are on an equal footing with the costliest exotics.

The four I have mentioned embody the necessary requisites for the farmer's wife: sweetness, beauty and ease of culture.

Recipes for Croquettes.

Banana Croquettes.—Remove the skin and coarse threads from bananas, cut in half, roll in egg and sifted bread crumbs seasoned with salt and pepper, and fry for a minute and a half in deep, hot fat, draining on soft paper.

Hominy Croquettes.—Use one cupful of cold boiled hominy, a tablespoonful of melted butter, a saltspoonful of salt and one beaten egg stirred until smooth. Shape into balls, roll in flour and set in a cold place over night. Fry in hot fat.

Chicken Croquettes.—Melt one-third of a cupful of flour in one-fourth of a cupful of butter with a scant half tea-spoonful of salt and one-fourth of a teaspoonful of black pepper. When frothy add half a cupful of cream and half a cupful of highly seasoned chicken stock. Simmer for five minutes, then remove from the fire and stir in one well-beaten egg and one pint of chopped, cooked chicken. When cold, shape, dip in egg and bread crumbs and fry in deep, hot fat.

Boston Baked Beans Croquettes.—Take a pint of cold baked beans, press

through a sieve and then add three drops of tabasco sauce with two tablespoonsfuls of tomato catsup, shape into small cylinders, roll in sifted bread crumbs, cover with beaten egg, roll in more crumbs and fry in deep, hot fat.

Gerónimo's Eighth Wife.

Gerónimo, the famous Apache warrior, seventy-six years of age, believing life too strenuous without a helping mate, has for the eighth time become a Benedict. This proved startling news to his tribesmen at Lawton, Okla., for they were not informed of his wooing. Two years ago Gerónimo's seventh wife died, and since then he has been converted and become a Christian. His latest bride was Mrs. Mary Loto, an Apache widow, aged fifty-eight.

What to Read.

If you have the blues read the twenty-seventh Psalm.

If your pocketbook is empty, read the thirty-seventh.

If people seem unkind, read the fifteenth chapter of John.

If you are losing confidence in men, read the thirteenth chapter of I. Corinthians.

If you are discouraged about your work, read the 126th Psalm.

If you find the world growing small and yourself great, read the nineteenth Psalm.

If you can not have your own way in everything, keep silent and read the third chapter of James.

If you are all out of sorts, read the twelfth chapter of Hebrews.

Nine times out of ten the doctor doesn't know what is the matter with the patient—but he knows enough not to say so.

The Young Folks

Love That Endures.

True Love is but a humble, low-born thing,
And hath its food served up in earthen-
ware;
It is a thing to walk with hand in hand,
Through the every-dayness of this
work-day world,
Baring its tender feet to every rough-
ness,
Yet letting not one heart-beat go astray
From Beauty's law of plainness and
content;
A simple, beside thing, whose quiet
smile
Can warm earth's poorest hovel to a
home,
Which, when our autumn cometh, as it
must,
And life in the chill wind shivers bare
and leafless.
Shall still be blest with Indian-summer
youth
In bleak November, and, with thankful
heart,
Smile on its ample stores of garnered
fruit,
As full of sunshine to our aged eyes
As when it nursed the blossoms of our
spring.
Such is true Love, which steals into the
heart
With feet as silent as the lightsome
dawn
That kisses smooth the rough brows of
the dark,
And bathes its will through blissful gen-
tleness,—
Not like a rocket, which, with savage
glare,
Whirls suddenly up, then bursts, and
leaves the night
Painfully quivering on the dazed eyes;
A Love that gives and takes, that seeth
faults,
Not with flaw-seeking eyes like needle-
points,
But, loving kindly, ever looks them
down
With the o'ercoming faith of meek for-
giveness;
A Love that shall be new and fresh
each hour,
As is the golden mystery of sunset,
Or the sweet coming of the evening
star;
Allike, and yet most unlike, every day,
And seeming ever best and fairest now.

—James Russell Lowell.

Aunt Kate to Donald.

Chicago, March 3, 1906.

My Dear Donald:—Thank you for giving my letter such a dignified name, "A Rhapsody upon Country Life." I didn't write it for that. It was only an expression of an honest opinion, called forth by my contact with crowded city life; perhaps by the fact, too, that you were in sympathy with that feeling. It is proof of what good friends we are, that you write me for "some pointers" as you express it.

There have been yards—yes, miles—written in regard to the behavior of young people, and none of it does any good, unless the advised ones are really in earnest, and want to do what is accepted as the right and proper thing for young people in the same social circle. You say that you do not like some of the ways that your young friends have, when out at an evening party. You particularly mentioned a young girl who caught a small stickpin from her escort, which they both fought to possess. They were only sixteen or seventeen, were among those who knew them well, and had known each other from childhood. And yet from the very fact that you felt the freedom out of place, I think that it was neither good taste nor good manners to indulge in that kind of a friendly tussle.

It is hard for young people who are in each other's company often, not to relax and become more free and easy than is quite consistent with good manners. This is an argument in favor of not too frequent gatherings. And I am very sure that this is just where town young folks make a mistake.

Games are very apt to degenerate, and the old-fashioned "kissing games," as they used to be called, are now believed to be neither modest nor in good taste.

Then the question arises, "What can young people do, when part of the crowd do not dance, and many are prejudiced against cards?"

It is a very old problem. Donald. Lately I have been impressed with the fact that young folks work very hard for their good times. It seems to me that we didn't, at the not so very remote period when I was young, but I may have forgotten.

For instance, I know of a certain high-school crowd who decided to have an evening party that should be quite original, and different, and that every one present should join in and enjoy.

There were three on the party committee, and this is the result of their united efforts.

The young people were invited to a kitchen party. Two cooks (the boys who planned the affair) with the waiters received them.

A long counter had been arranged in the kitchen. The cooks in white caps

and aprons, cooked short-order suppers as the orders were called by the waiters.

It was of course a limited menu of Hamburg sandwiches, fried eggs, etc.

A card telling what would be served and at what price, hung beside the door. There was a cashier who received the checks for suppers, as at any well-appointed restaurant. This party was voted a perfect success; but at least five people planned and worked hard two days to accomplish the result, and I wondered if, after all, it paid.

What can have become of the "gentle art of conversation," when it becomes necessary to a good time, for somebody to plan such elaborate affairs?

I have been wondering if a crowd of young people who meet socially every week or two would not enjoy a conversation club, something like one I attended a short time ago. This club was as informal as possible, meeting at the different homes, and I believe having no officers.

At each meeting two of the members were asked to present topics for conversation at the next meeting. No one but the person giving the topic knew what it was to be beforehand.

Each member was allowed five minutes to talk upon the subject presented.

Matters interesting the world at large were chosen for discussion, and the different points of view upon the same subject were most interesting.

This was a club of older people, but why not for young people?

They want to be as well informed as to what is interesting the world, and as able to think and talk about it intelligently, as their elders.

The members of this Conversation Club tell me that it helps to keep them posted, makes them read more carefully items of public interest, not skimming over them as we are all too apt to do, and teaches them to express themselves in fewer and better words.

There were no refreshments served, and so it involved very little care for a hostess, and furnished a delightful and instructive evening which I found anything but dull.

I'm afraid I have helped you very little; but you must not think that your country neighborhood is any different from other places. Young people are much the same the world over, and the same difficulties and problems are before them all.

I remember years ago, a dear old gentleman saying to me, "Don't make the mistake of thinking that your chief object in life is to have a 'good time.' That may be one object, but it is by no means the highest or best one." I have thought of that many times since. Make your pleasures serve you; do not serve your pleasures. And always and forever, Donald,

"Be noble, and the nobleness which in other men lies sleeping,

Shall rise in majesty to meet thine own."

I hope I've said something to help a little. Your loving

AUNT KATE.

Essay on Boys.

WRITTEN BY A TEN-YEAR-OLD.

Boys are curious things, some of them have their way or none. It is a curious fact that it takes two boys much longer to do a piece of work than it does for one. Boys have a great way of helping each other do nothing. They are always getting into trouble, or getting somebody else in.

Boys receive the blame of the family. They are all the time hurting their feet, or stamping their sore toes, or falling down and hurting their arms.

Boys generally put everything that is not too large in their pockets. If any one were to ask a boy what was in his pocket, he would tell him a knife, a spool, half a dozen fishhooks, fishing lines, a whistle, a marble, a rock and every other thing he can find to put in it.

A boy loves to play and run. He wants a gymnasium at school and at home. And of course he has to play baseball and football. He likes to go to school when there is hard work to do at home. But on picnic days he wants to be excused so that he can learn to swim. (If the picnic is on a lake or river.) When he "hits his first flick" in swimming he thinks he can swim a long ways. And he is very proud of his success.

A boy likes to do chores, especially when it is to go to the store for some nails or something like that.

You hardly ever find a boy that would not play baseball when he thinks his side will win.

It is a boy's nature to be sick when the time comes to pull fodder and turn potato-vines or anything else that he does not like to do; but he is always well when fishing time comes around.

Distinctive Prints



Simpson Eddystone talcoes are distinctive. Exclusive designs in large variety and beautiful color-effects, printed on fabrics of superior texture, give them the distinction that for three generations has characterized "Simpson Prints." It is more marked now than ever before. The latest and best machinery and Eddystone art has made it so.

Ask your dealer for Simpson-Eddystone Prints.
In Blacks, Black-and-Whites, Light Indigo-Blues and Silver-Greys, Shepherd Plaid Effects and a large variety of new and beautiful designs.
Thousands of first-class dealers sell them.



The Eddystone Mfg Co (Sole Makers) Philadelphia

Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—ALL WOOL.

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a LOWELL INGRAIN.

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: LOWELL INGRAINS are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a LOWELL INGRAIN when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a LOWELL INGRAIN.

Manufactured by BIGELOW CARPET CO., New York

A boy usually wants a dog, and if he gets one he wants to go hunting. Then if his father objects he gets sort of hot. And his dad uses a frail pole to cool him off. (I know by experience.) Then after the boy gets behind the wall, if you follow him and listen close you can hear him say: "Dum it all anyhow. I wish that dog had never been born."

The boy likes to milk and has his favorite cow and she generally gives more milk than the others. The reason of this is he "feeds her good," as he calls it and beats the others.

The boy generally stays at home to feed the chickens and milk the cows when the others go to spend the day with their neighbors. That is the part he does not like.

Boys are queer beings. Sometimes they are told that they wear out everything but soap, rags and working utensils.

A boy has to do the hard work in winter. He is after night getting the cows milked; and the cows aggravate him so bad, just because he is about to freeze. "The cow would not cut up so if he would not whip them," says his father. But he thinks different and he keeps whipping them when they kick at him, and it generally makes them worse but he doesn't think so.

A boy likes to have Christmas come for then he has a whole day to himself. When he gets the wood and water up by this time it is ten o'clock. But he is glad to get off that soon. In a boy's way he has a fine time—playing marbles, wrestling and boxing. If he is where the snow falls he gets his sled and joins a group of boys about his age. They have a fine time. Finally, when night comes the boy has to get in wood and then he is sent to bed soon so as to get an early start next day. But after all boys have a fine time.

Jimmie D., in Farm and Fireside.

The Madonna.

Loveliest and most exquisite of the pictures that adorn our homes are those representations of the Madonna that artists for ages have loved to paint. Still lovelier are the madonnas one meets as one goes about the world. In a suburban train, one summer day, an Italian peasant took her seat by my side. She was a mere girl, not more than sixteen. On her bare brown hand showed her wedding ring, and in her arms she held a tiny infant, a wee scrap of humanity. Her face was radiant with pride and joy. From time to time she lifted a corner of the veil that hid the little crumpled face of the bambino, peeped at it and looked up with an expression so angelic, so heavenly, that it made my heart warm.

"Please let me look," I said. And never queen, with greater triumph in possession, displayed her princely offspring than this youthful peasant mother showed her little child. "How old is he?" I asked. And the answer came, "Just three weeks old to-day." God bless her and every other mother

LOW
ONE-WAY RATES
VIA
UNION PACIFIC
FROM

TOPEKA EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

MACHINE OIL

\$3.50 A BARREL

You will find it a better machine oil than anything you have been buying for 35 cents to 45 cents per gallon. Premium Oil is a natural oil, greenish black in color. There is no made oil that is superior to Premium Oil for enginors, shafting, shops, elevators, thrashing machinery and farm machinery. It will not GUM, has good body, is not affected by hot and cold weather as most oils are. If a farmer, you say you won't need as much as a barrel. Get your neighbor to take half of it. But remember \$3.50 for a 50-gallon barrel, and the empty barrel is worth at least one dollar; gives you oil at less than 6 cents per gallon at your railroad station. If within 300 miles in Kansas freight will not be over 75 cents per barrel. Sample sent on request.

T. C. DAVIS, Benedict, Kans.
Benedict, Kans., August 26, 1905.
I have this day sold my interest in K. C. Dailey & Co. to T. C. Davis, who will hereafter conduct the business in his name. Signed, K. C. DAILEY.

who cradles her babe with such delight!—Margaret E. Sangster in Woman's Home Companion.

The Little Ones

Only a Little.

One little star in the starry night,
One little beam in the noonday light,
One little drop in the river's might,
What can they do, oh, what can they
do?

One little flower in the flowerful spring,
One little feather in one little wing,
One little note when the many birds
sing,
All are so little, feeble, and few.

Each little star has its special ray,
Each little beam has its place in the
day,
Each little river drop impulse and sway,
Feather and flower and songlet help,
too.

Each little child can some love-work
find,
Each little hand and each little mind,
All can be gentle and useful and kind,
Though they are little, like me and like
you.

—Susan Coolidge.

Letter from a Kansas Boy Eight Years Old.

Los Angeles, Cal., Feb. 23, 1906.

Dear David:—I hope you are well now. We had vacation yesterday and to-day. Hurrah for George Washington! We went to the beach yesterday. The ocean is fine. Papa and I waded in it. The place is called Venice. They have canals instead of streets. We went out on the pier and saw them catch fish. The ocean breeze makes you awful hungry. It is worse than camping. We had hot tamales with our lunch. They are good. I wish you had been with me. Patricia was as happy as a bird. We don't know when we are coming home. I passed at school. Mamma says my writing gets worse all the time. Have you read "The Wizard of Oz?" It is 8 o'clock here. I suppose you are asleep. If you were here we would climb a mountain to-morrow. Say hello to Charlie and Curtis for me. Good-night.

HAROLD C. EVANS.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wisbord, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Osborne, Osborne County (1902).

Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).

Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).

Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabeen Club, Mission Center, Shawnee County Route 2 (1899).

Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).

The Lady Farmer's Institute, Marysville, Marion County (1902).
Women's Country Club, Anthony, Harper County.

Taka Embroidery Club, Madison, Greenwood County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1903).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.

The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).

(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

The Race Question.

I. The black man's rights.
II. The white man's duty.
III. Transport or educate?
I. The race question is well worn but will bear further discussion. Topic I may embrace the question of equal opportunities with the white man, his rights in the commercial and political world, and his right to use public thoroughfares and utilities. It may also show the attitude of the different localities towards the negro and the reasons for the same.

II. Since the negro is here not by his own free will but was brought here by the white man, is the latter under obligations to him? Is he or is he not

A Food to Work On

Work! Work!! Work!!!

Lots of energy is needed to keep up the pace. In the struggle, the man with the strong body and clear brain wins out every time.

The man of to-day needs something more than mere food; he needs a food that makes energy—a food to work on.

Although some people may not realize it, yet it is a fact, proved and established beyond doubt, that soda crackers—and this means **Uneeda Biscuit**—are richer in muscle and fat-making elements and have a much higher per cent. of tissue-building properties than any other article of food made from flour.

That this is becoming known more and more every day is attested by the sale of nearly 400,000,000 packages of **Uneeda Biscuit**, the finest soda cracker ever baked. An energy-giving food of surpassing value—sold in a package which brings it to you with all the original flavor and nutriment perfectly preserved. Truly the food to work on.

Whoever you are—whatever you are—wherever you work—**Uneeda Biscuit**.

NATIONAL BISCUIT COMPANY

5¢

families which is an every-day delight throughout the long winter.

Then a banquet was held in January, after all the holiday parties were over. There were a few invited guests. A good program was furnished by the musicians and reciters of the club, with remarks by the gentlemen; after which the gentlemen chose their partners for supper, "a la Mother Goose," and each Father Hubbard led his Mother Hubbard to where there were all sorts of bones from the cupboards.

In February, we surprised one of our members who moved away the first of March, taking with us our luncheon, and we had a royal good time. In the month we arranged by telephone a surprise on one of our young ladies who was to be married the next week, taking along not only our refreshments but a silver cake-basket and cream-ladle as well.

A meeting of the club for payment of dues, filling vacancies, and making of year-book, was called for the first of March, and a visit is proposed to the art exhibition to be held by the clubs of Osage City on March 16 and 17. On April 12 the club begins its work for 1906.

One thing I have forgotten. At the close of last year's work there were committees of two ladies appointed from each of the four districts over which the club membership extends, to cooperate with the teachers in the districts in purchasing pictures for the schoolhouses. First there was given an entertainment by the club, for the raising of money to be divided into four parts, then each school district held during the winter an entertainment, the programs being furnished by the pupils, aided by gramophones, each district having all the money raised by its members. Then the club committee and the teacher of each district made their own purchases. A delegation of club members visited the schools and examined the pictures, the choice of which has been excellent. Addresses were made to the pupils who gave rapt attention. One school had the tomb of Washington at Mt. Vernon, a chromo done in autumn colors. One of the club members who had visited Mt. Vernon had the closest attention while she related her visit and recounted the many wonderful and historic relics to be seen there.

MRS. IDA M. FERRIS.

Osage County.

responsible for his welfare to a certain extent? Does the white man owe him sympathy, help, protection, justice and charity? These are a few suggestions for this subject.

III. Booker Washington once said in an address, "The negro is here and here to stay. If you should transport negroes by the shipload, another shipload would be born before breakfast." The possibility and advisability of sending the negro out of the country back to Africa, may be discussed in connection with the pros and cons of educating him. If he is to be a citizen of this country, shall he be among the best or among the worst?

MRS. I. D. GRAHAM, Secretary.

Domestic Science Club.

WORK FOR THE COUNTRY CLUB IN WINTER.

City clubs disband for the summer, country clubs hibernate in the winter. Sometimes our city sisters have a picnic during hot weather but they usually manage to have such affairs early in the season before they close for the summer. The country sisters can not hold their club meetings during winter—the days are too short, and there is crowded into them too much work; besides, there are the children to get off to school, and supper must be nearly ready when they return at night, hungry as bears. Then, there is no eldest girl to leave the baby with or to care for Buster, and the weather is too uncertain to take them along. If upon an occasional pleasant afternoon, the children are over their colds or tonsilitis sufficiently to be taken abroad, you hesitate long before you venture to drive the horse with those children along, after it has stood shivering in the cold for three hours. One such experience would convince you that you would not be justified in risking life and limb for the sake of attending a winter club.

City clubs arrange for about three receptions during the winter. The country club can not arrange for any, as the evenings are too short in winter and men and teams are too tired to attend them in summer. There ought to be some way provided whereby the young people and husbands can have some of the social benefits of the club. Perhaps it will be of interest to our country sisters to learn how the Domestic Science Club obviated that difficulty.

In the first place we arranged for a traveling library for the use of club

Miscellany

The Production of Good Seed-Corn.
C. P. HARTLEY, U. S. DEPARTMENT OF AGRICULTURE, BEFORE THE KANSAS CORN BREEDERS' ASSOCIATION.

The great interest that is manifest throughout the United States recently regarding the increase in production of corn per acre by proper selection and care of seed, rests upon the fact that in this way the profit of corn-growing can be greatly increased without an increase of labor or expense. There is no urgent need of the United States' increasing its production of corn. We now grow three-fourths of the corn produced by the entire world, but it is grown by processes that are too laborious. Our yearly crop of 2,500,000,000 bushels should and could readily be produced upon half the amount of land that is now used in its production. Think of the great amount of labor of plowing, planting, and cultivating that would be saved if the corn-crop of the United States were produced on 45,000,000 acres instead of the 90,000,000 acres now used. One of the principal means of accomplishing this great saving of labor is by the planting of better seed.

There remains much to be learned about this the most valuable crop of our country, but if the facts we now know were taken advantage of by all corn-producers, our average yield per acre could be raised from 25 to 40 bushels per acre in one year's time.

ENVIRONMENT.

We know that plants adapt themselves to their environments. The cypress has become adapted to growing in swamps, and pine- and cedar-trees are often grown in dry locations in the crevices of solid rocks. A change of the cypress to the rocks or of the pine to the swamp would be disastrous. The trees would not become accustomed to the changed conditions.

The corn-plant is no exception to this rule. Some varieties are accustomed to the long growing season of the South and others to the short growing season of the North. Further than this some have become adapted to rich lowlands and others to the poorer highlands. These varieties, if changed from one condition to another, cannot be expected to succeed well till they become adapted to their new conditions.

We sometimes hear a corn-grower state that he must send off and get some new seed-corn; that he has been growing one kind so long on his farm that it has "run out." Perhaps his strain of corn has "run out" or run down in production but it is not because he has been growing that kind of corn on his farm so long. It is because he has not kept it up by the selection of good seed. The best dairy herd in the world would run out if placed in the hands of a man who would pay no attention to its breeding.

We have good proof that the longer a corn is grown under certain conditions of soil and climate, the better it becomes adapted to those conditions. This is shown by the fact that the best corns we have are those strains that have been grown for many years under the same conditions and have been improved by careful selection.

Through the painstaking labor of such corn-breeders as James Riley and James L. Reid some sections are blessed with good strains of corn, but the majority of States are falling below their possibilities because there have not as yet been bred productive strains of corn suited to their conditions. The greatest need of the country in regard to corn-production is the need of careful corn-breeders, located in different parts of the United States, who will by means of the best methods known breed uniform and highly productive strains suited to their respective localities.

METHODS.

The methods to be employed in the breeding of highly productive strains of corn are based on the same principles as those of animal-breeding. The secret of the work consists in constantly breeding from the best, knowing that with certain variations "Like begets Like." If each kernel on an ear of corn should produce an ear exactly like the ear from which the kernel was taken, improvement would be impossible. Coupled with the tendency of seed to produce like the parent plant is a variation of individuals which makes improvement possible. While all kernels of an ear produce ears much like the parent ear some will be better and some poorer. The work of the breeder is to save seed from the best,

and by best is meant the one that produces most abundantly.

Of two ears equally good from all appearances, one may produce twice as much as the other. This has been demonstrated again and again. In some instances half of the seed from each ear has been planted in one location and the other half in another, by this method proving that it is the inherent tendency of some ears to produce well and of others to produce poorly that causes the variation in production, and that the variation can not always be attributed to the better location of certain rows in the field. Furthermore, it has been demonstrated that in many cases the progeny of the productive ears inherit the power to produce bountifully.

It is evident, then, that in order to breed for increased production, we must determine the relative power of the seed-ears to produce well so that we may save seed from the progeny of productive parents.

This brings us to the necessity of planting separately the seed from individual ears in a manner that will fairly test the relative tendencies of the ears to produce. The location even of different rows in the same field influences production so much that it is advisable to choose locations where the soil is very uniform and plant some of the kernels from each ear in two different locations. When this is done it is quite safe to assume that the ears that have produced best in the two locations have done so because of their inherent tendencies for greater production. While it is not the object of this paper to lay down a particular plan and say that it should be adhered to, it should be said that for greatest success it is necessary to adopt some plan of planting that will prove the relative power of the seed-ears to produce. This is just as necessary as it is to know the record of the individual animal in breeding for butter production.

COMPARATIVE TESTS.

Right here let me mention the importance of making comparative tests of the producing powers of the seed-ears one season, and reserving a portion of the kernels of each ear tested, so that the next year a breeding-plot can be planted with seed from the ears of highest producing power. In this way it will be known that all the stalks in the breeding-plot came from high-yielding ears. Unless the ears are tested one season and only the most productive planted in the breeding-plot the next season, it often becomes advisable to detassel the stalks in some of the poorer rows in the breeding-plot to prevent the pollen from the poorer rows from pollinating the silk in the good rows.

As soon as the necessity of testing the producing power of individual ears and of preventing undesirable stalks from forming pollen is emphasized, there arises strong argument to the effect that the average farmer has no time for the necessary details. If one can purchase well-bred seed adapted to his conditions, it is not necessary that he become a corn-breed. It is not necessary that every corn-grower be a corn-breed. In order that every grower may plant well-bred, acclimated seed it is necessary that we have a corn-breed for every section that has distinctive soil and climatic conditions.

If you have within your locality a conscientious corn-breed, you are fortunate and you should give him your hearty support. If you have none, it is time that some one among you take up the work and do it so well that your neighbors will see the effects in the splendid crops you produce. Then they will want some of your seed. Probably they will want you to exchange corn with them bushel for bushel, but after you have bred a more highly productive strain of corn you are entitled to three or four dollars per bushel for your seed.

CORN BREEDING PROFITABLE.

A conscientious corn-breed will usually have no difficulty in disposing of his seed at a profitable price to himself and to those who buy. It is profitable to pay \$6 per bushel for seed that will produce fifty-three bushels per acre rather than plant seed that costs nothing and produces but fifty bushels per acre.

The fraudulent practices of some men who advertise extensively and sell as well-bred seed-corn, corn that possesses no merit has caused many to discredit the importance of good seed. As precaution against being imposed upon in this respect, it is best always to purchase seed-corn as ear-corn and to purchase but a small quantity unless the honesty of the seller and the merit of

Williams' Shaving Soap

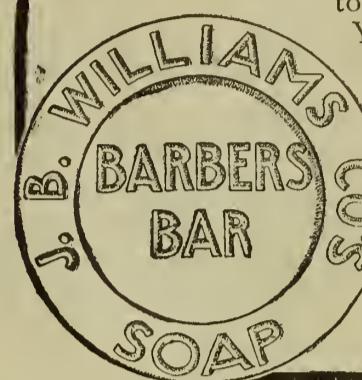
Williams' Shaving Soap "will not smart or dry on the face."

You know how common soap dries up into a scum—how it burns and smarts. You can avoid it all by using Williams' Shaving Soap.

Send 2c. stamp for trial sample (enough for 50 shaves).

Williams' Barbers' Bar, Yankee, Mug, Quick & Easy Shaving Soaps, and Williams' Shaving Sticks.—Sold everywhere. Address,

THE J. B. WILLIAMS COMPANY,
Dept. A, Glastonbury, Conn.



Good Galvanizing

is what gives wire fence long life. Some manufacturers say their fence is made of extra heavy wire, and therefore resists the action of rust longer. What a confession! If the wire were properly galvanized there would be no rust for many years. When rust once begins, it will destroy even a heavy wire in a few seasons. The practical way, therefore, is to use wire of a size sufficient to give ample strength to the fence and to protect the wire from rust by good galvanizing. We have special arrangements with a large manufacturer of galvanized wire to have our representative always on the ground at the wire mill to see to the proper galvanizing of our wire and to reject all wire not properly galvanized. "Steel for strength, and galvanizing for protection," is our motto.

Construction. Advance Fence has the continuous stay. Our stay is not cut at the top or bottom, or anywhere else, but runs continuously up and down across the fence and without an end for many rods. Thus, we preserve and utilize all the strength of the wire used, about half of which is wasted in fences with cut stays. Our fence has the most perfect provision for expansion and contraction, caused by changes in temperature. It can be stretched over uneven ground without the slightest difficulty.



Buy Fence Direct from the factory. It is cheaper, and so much more convenient. We offer a line to select from several times as large as that carried by the best dealers—26 styles and heights of fence and 24 styles and sizes of gates, besides stretchers, etc. This enables you to get a fence exactly suited to your requirements, which alone may effect quite a saving for you.

Thirty Days Free Trial. Place your order with us for what fence you need and try it. If you do not like it, and it is not just as represented in every particular, you can return it to us at our expense, and we will return your money. That's what we call a fair proposition. We could not make it, if we were not sure Advance Fence would please you.

We Prepay Freight to any steam railroad station in the United States, on 40 rods or more. Thus you know beforehand just what your order will cost you delivered at your door. We guarantee the safe delivery of your shipment by the railroad company.

Write today for our Free Fence Book and Wholesale Delivered Prices.

Advance Fence Co., 3769 Old St., Peoria, Ill.

GET THE BEST—TOWERS' SURFACE CULTIVATORS

for corn, half-corn, cotton, tobacco, sorghum, potatoes, beets and other vegetables.

THREE SIZES: for two rows or one row—three horses, two horses or one horse.

"We got 49,500 cases more corn from our 3,300 acres than ever before under best conditions. Would not attempt to farm without Towers' Cultivators. IROQUOIS CANNING CO., Oshawa, Ill."

Free Treatise on Surface Cultivation. Introductory prices where we have no agents.

J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40

Made of the best Soil Center Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for Extra Share \$1.75 big free catalogue of Riding Plows, Disk Harrows, Listers, Cultivators, everything in the Implement Line; Buggies, Wagons, Harness, Steel Ranges, Sewing Machines, and a thousand other things sold to you direct at wholesale prices. Write now and get ready for spring work.

16-inch Only \$8.95 Extra Share \$2

12 in Hard Steel Castor Counter With Mow \$1.25 13 in. 1.00 HAPGOOD PLOW CO., 77 Front St., Alton, Ill.

13 in. 1.00 The only plow factory in the United States selling direct to the farmer.

CATALPA AND OSAGE FOR POSTS!

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

REAL ESTATE.

FARMS FOR RENT—Wheat farm and two dairy farms. Would rent cows to good men; also want to get 300 acres of prairie broken up at \$1.50 an acre. W. W. Cook, Russell, Kans.

I HAVE for sale a 1760 acre stock farm or ranch; bottom and alfalfa hay; good buildings and a 640 acre stock and hay farm. Write me and let me send you descriptions and prices. E. H. Boyer, Meade Co., Meade, Kans.

FOR SALE.—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

WANT WESTERN LAND or cash in exchange for the Best Welding Compound on the market. Something every blacksmith in the United States uses. One hundred pounds free goes with the formula for making the compound. Just the thing for the man who wants to retire from the farm. Address box 27, Wanika, Oklahoma.

FOR SALE.—Forty-two acres of land adjoining the city of Erie, Kansas, county seat of Neosho. This land was formerly the old fair grounds, and has about \$3,500 worth of buildings on it; some timber, good soil, and plenty of water. Will make the finest place in Kansas for a hog farm. Will sell or rent or go in partnership with a good man with some money who understands raising pure-bred hogs. C. E. Shaffer, care of Kansas Farmer.

TO TRADE IN STOCK, 8000 100-acre farm in Cherokee County. H. H. High, Faulkner, Kans.

READ, CONSIDER, COME, OR WRITE—80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres, improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realy Co., Clay Center, Kans.

A BARGAIN—188 acre farm, 80 in cultivation, balance pasture; 5 room house with cellar, new barn \$350. Also cattle-shed, corncrib, granary, hen house, and implement-shed, well, windmill, orchard; 1½ miles to school 3½ miles to Alta Vista in Wabaunsee County. Price, \$5,600. A. H. Meseke, Alta Vista, Kans.

KANSAS FARM LANDS for sale in Republic and Washington Counties, 180 miles from Omaha, St. Joe and Kansas City, located in the corn and alfalfa belt, where the farmer has got rich by feeding hogs and cattle and selling out to live a retired life; for prices and description of improved farms, write to J. E. Caswell, Belleview, Kans.

MORRIS COUNTY LAND—640 acres of fine land—adjoining railroad town, 500 acres of which is first class farm land; no buildings; price \$10,500. 320 acres good land, half in cultivation, 5 room house, new barn, only 3½ miles out; snap, \$7,500. Splendid ranch 480 acres—300 in cultivation—10 room house, barn, spring in corral, steel mill; alfalfa. Price \$13,000. Easy terms, \$3,000 acres. Finest ranch in the county. Will sell by quarter, half or section. Apply to John Taggart & Son, White City, Kans. Mention Kansas Farmer when writing.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

FOR SALE—320 acre well improved farm, 6 miles from Emporia. Price, \$25 per acre. Write Hurley & Jennings, Emporia, Kans.

A 320-ACRE FARM within two miles of good town. Good new house, barn and stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

440 ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock or fruit farms. I have farms in Oklahoma, Missouri and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 965, Wichita, Kans.

LAND FOR SALE—in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

CASH for your real estate or business, no matter where located. If you want your property sold quickly send us description and price. N. B. Johnson & Co., 547 Bank Commerce Bldg., Kansas City, Mo.

FINE STOCK FARM FOR SALE—640 acres, one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price, \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 111 W. 6th St., Topeka, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good washing facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class, well-equipped dairy farm. M. V. RICHARDS, Land & Industrial Agent, Washington, D. C.

the seed are well known by the purchaser.

Until the time arrives when we shall have skilled, conscientious corn-breeders in the various sections of the United States, it will be necessary for many farmers to select and care for their own seed-corn, and the profit on their corn crop depends very greatly on the way in which the seed is selected and preserved.

Seed-corn should be selected from the standing stalks soon after the corn ripens. If one is growing a strain that produces several ears per stalk it is necessary to see the entire production of the stalk before it can be determined whether it is a suitable individual from which to save seed. In working with strains that produce but one ear per stalk some progress can be made by studying the characters of the ears but it is best to know from what kind of stalks the ears were taken. This can be known only by selecting seed-corn from the stalks as they stand in the field or seed-plat. We have had brought to our attention to-day by Professor Lavitz, the great superiority of plant-selection over seed-selection. His work relates to wheat and other small grains but the principle applies also to corn. It is time for corn-breeders to give more attention to the plant, its location in the field, its ability to withstand untoward conditions as drouth and wind, its freedom from suckers, disease, etc., for these undesirable stalk characters are transmitted to the progeny.

In a recent experiment conducted by the Department of Agriculture it was shown that with the Blount Prolific corn, seed-ears taken from stalks that possessed one or more suckers, and which had been hand-pollinated with pollen from stalks possessing suckers, produced a crop having 14½ per cent of suckers. Other ears taken from stalks having no suckers and which had been hand-pollinated with pollen from stalks having no suckers, produced a crop having but 2½ per cent of suckers. This shows the possibility of producing strains of corn free from suckers and such strains are quite desirable. Suckers sap the ground to almost the same extent that an equal number of stalks would, and they produce inferior ears or none at all.

CHARACTER OF STALK, EAR, AND KERNEL.

It is not necessary here to take up the character of good seed-ears. These points you are studying in connection with the corn-judging work now in progress. One thing of much importance is to get the desirable characters of stalk, ear, and kernel clearly in mind and each year breed from individuals that adhere closest to the type. If this is diligently continued, the tendencies of the plants to reproduce their stalk, ear, and kernel characteristics will year by year bring the corn closer to the ideal type.

Highly desirable plants, bearing especially good ears, are not numerous, especially in a corn that has received little breeding. No one who expects to save his own seed-corn can afford to mix his best seed-ears with others less desirable. The very best should be planted in a seed-plat, which, if complete isolation is not practicable, may constitute an acre or more in a field of the same kind of corn.

There is always a great liability that any work that does not have to be done at a particular time will not be done at all. This is too often the case with the selection of seed-corn. The apples must be picked, potatoes dug, etc., or a freeze will ruin them. If seed-corn is not properly selected in the fall, the loss is as great as would result from a failure to gather the apples or dig the potatoes, but the loss does not become apparent so quickly.

It is not a question as to whether it pays to select good seed and take proper care of it. It is certain that it does. None can afford to neglect it. This is shown by a demonstration made by the Department of Agriculture of the profit resulting from attention to good seed. In a field of a strain of corn that had been grown in Ohio for fifteen years, ten acres were measured off and gone through carefully for the purpose of obtaining seed from the best plants. Seventeen bushels were obtained and from this enough of the very best ears were selected to plant ten acres at the side of a 65-acre field, the rest of the field being planted with other good ears from the 17 bushels. The ten acres where the very best seed-ears were planted averaged 96 bushels per acre. The remaining 55 acres of the field averaged 94 bushels per acre and other fields surrounding and on equally good soil and similarly treated, but planted with seed taken at planting time from the crib, averaged but 90 bushels per

REAL ESTATE.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 156 Wabash Avenue, Chicago.

FOR SALE.—640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

Nemaha County Farms
Nemaha County, Kansas cannot be excelled in the production of Corn, Oats, Millet and Speltz. Alfalfa, Clover and Blue Grass have no equal. Write for prices and description. KNIGHT & SPICKELMIER, Centralia, Kans.

FOR SALE

Farm 2,160 acres, 570 acres in wheat. 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon.

M. E. Beall, Woodring, Kans.

If you have farms, ranches, or city properties for sale or trade anywhere in the State, we would like to have you list the same with us by sending a thorough description together with lowest prices and best terms. We have a fine list of city properties in Topeka and farms around the city, some for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS,
116 E. Fifth St., Topeka, Kans.

Who Is H. P. Fitzgerald?

He is the man who can sell you land anywhere in Kansas. One hundred and sixty acres 2½ miles from Jamestown. Fine improvements, also best of wheat land. This farm can be had for 30 days at \$4,000, also 160 acres of farm adjoining, same price, all under cultivation.

CASH FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 415 Kansas Avenue, Topeka, Kans.

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps, address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of Kansas, 200 miles west of Atchison, on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa and other cereals, successfully.

THE DOWNS REALTY CO.,
Downs, Kansas.

Hurley & Jennings'
Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate
and Loan Co.

Holton, Kansas,

Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

NO ONE WHO VISITS
COLORADO
CAN AFFORD TO MISS
A TRIP OVER THE

SWITZERLAND TRAIL OF AMERICA.

The Colorado and Northwestern R. R.

DENVER to Eldora and Ward

Takes you to the CONTINENTAL DIVIDE; to the land of perpetual snow and through the great Gold, Silver and Tungsten Mining Camps of Northwestern COLORADO. Challenges the world for Scenic Grandeur and Beauty.

Leave DENVER (Union Depot)..... 8:00 a. m.
Returning, arrive..... 5:45 p. m.

L. R. FORD,
General Passenger Agent,
Boulder, Colorado.

When writing advertisers please mention Kansas Farmer.

REAL ESTATE.

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. Niquette Bros., Salina, Kansas.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
819 Walawright, St. Louis.

H. C. BOWMAN,
SHAWNEE COUNTY FARMS.
TOPEKA RESIDENCE AND MERCANTILE PROPERTY.
VACANT LOTS.
TEXAS RANCH LANDS.

42 Columbia Bldg., Topeka, Kans.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

Don't Depend
upon the
Weather
to insure
Your Crop

Buy Land

In the greatest of all
IRRIGATED DISTRICTS

Southern Alberta,
Canada

Where the mammoth irrigation project, inaugurated by the

Canadian Pacific Ry.,

is now going on.

100,000 Acres

of the million and a half acres of this enormous undertaking are located to the north of the main line of the Canadian Pacific Railway, near Gleichen, in one great body.

Ready for the Settler

Remember, that this land is in a district famed for its tremendous crops of hard winter wheat, alfalfa and sugar beets.

The Price:

\$18.00 to \$25.00 per Acre

THE CANADIAN PACIFIC RAILWAY
will forever maintain the canals and laterals at a nominal cost of 50 cents per acre per annum.

GET A LOCATION NOW,
DON'T WAIT

For further particulars and certificate of low railroad rates, write

Canadian Pacific
Irrigation Colonization
Co., Ltd.

Calgary, Alberta, Canada.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Wheat Farms on Easy Terms

We offer to BONA-FIDE SETTLERS their choice of one-hundred
160 acre farms in

Sherman County, Kansas

At from \$5 to \$15 per acre. ONE TENTH CASH, the balance payable in nine equal annual payments. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King,

= = =

McPherson, Kansas

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the North-west. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),
Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.
Mention Kansas Farmer when you write.

Western Kansas Wheat Farms

Deal with the owner direct. Save commissions. Know you are getting your land at the right figure. We own and control 60,000 acres of the finest wheat and corn lands in central and western Kansas. We have one price for everybody. You can buy a farm on ten years' time with interest at 6 per cent, or you can pay cash and get 5 per cent discount. Our farms are bargains, every one of them, and are in the best counties of Northwestern Kansas; close to schools, railroads, towns and churches, in well settled localities. If you have \$200, you can own a farm and home of your own. No poor land.

The Grain Belt Realty Company, Concordia, Kansas

SNAKES

are not found in the SNAKE RIVER VALLEY, but here is found the most beautiful tract of agricultural land in the United States, and you do your raining, and have no failures of crops, that's irrigation. No Cyclones or Blizzards. This country needs live, wide-awake men, who wish a new home in the rapidly developing west, and offers cheap land, good church and school facilities, and a chance to make money to those who are willing to work. St. Anthony, the County seat of Fremont County, Idaho, is a bright and growing town in the very heart of a rich and growing richer country, and if you wish reliable information in regard to prices, soil, climate and our prospects; write any of the following firms: First National Bank; C. C. Moore Real Estate Co.; Wm. D. Yager Livery Co.; Murphy & Bartlett, Cafe; Commercial National Bank; C. H. Moon, Farmer; Chas. H. Heritage, Riverside Hotel; Miller Bros., Grain Elevator; Skalek & Shell, General Merchandise; Chas. S. Watson, Druggist; Gray & Ross, Townsites; W. W. Youmans, Harness Store.

F FARMS THAT PAY 25% TO 50%

in southeastern Kansas, 113 miles south of Kansas City, only 30 miles west of Missouri, in the rich limestone soils where

EVERYTHING GROWS LARGE

Prices lower than for fertile improved farms anywhere in the corn belt, where every tame grass grows rank. The great Premium Corn grows here. SEND FOR PRICE LIST. No trades, 40, 80, 100, 120 and larger.

THOS. D. HUBBARD, Kimball, Kan.

aera. Good seed increased the yield 16 bushels per acre. No corn-grower can afford to neglect selecting his seed in the fall and caring for it properly.

STORAGE CONDITIONS.

Another test will be described to show the effect good care during the winter has upon the power of seed-corn to produce.

About ten bushels of ears were selected from standing stalks at ripening time and divided into two similar lots. One lot was placed under crib conditions and the other lot dried gradually and quite rapidly and kept dry and at a comparatively even temperature during the winter. One lot was placed in one box of a planter and the other lot in another box, and in this way seven acres were planted on river-bottom soil and twenty on upland soil. By planting in this manner there were throughout each field two rows planted with well-preserved seed alternating with two rows planted with the seed that had been subjected to crib conditions. This method was followed in order that the two lots would have equal locations regarding soil.

The well-preserved seed produced on the bottom land 85½ bushels per acre and the cribbed seed 67 1-3 bushels, a difference of 18 bushels. On upland the seed that had been well cared for

produced 64 bushels per acre while the rows planted with the lot kept under cribbed conditions produced 57 bushels per acre. We here have an increase of 18 bushels per acre on the river-bottom and 7 bushels per acre on the upland as profit for having simply taken good care of the seed. The point of particular interest is that both lots of seed germinated equally well and that the greater production was due to the greater vigor of the plants that grew from the well-preserved seed. The average yield per stalk was greater than that of the plants growing from the seed subjected to crib conditions.

The opinion is too prevalent that if seed-corn will grow it is all right. It is not only necessary that it grow, but it should grow vigorously. Some animals live and grow but yield no profit because they do not grow vigorously. The germ of each kernel of corn is alive and if it is to be used as seed and expected to grow vigorously it should be well cared for from the time it matures in the fall.

Grapes and pineapples are blessings in the sick room. Only the juice of either should be swallowed. It relieves thirst and is nourishing, acting upon the liver and kidneys beneficially.



Wheat field on farm of Samuel Cox, Radison, Sask.

BUY A CANADA WHEAT FARM

MORE THAN ONE HUNDRED THOUSAND AMERICAN FARMERS are going to Western Canada this year. THE GOLDEN GRAIN BELT of the world. Twenty-two years without a crop failure. We offer you from which you can MAKE YOUR OWN SELECTIONS

THE ENTIRE CANADIAN NORTHERN RY. LAND GRANT

located in
THE FAMOUS SASKATCHEWAN VALLEY
THE CARROT RIVER VALLEY AND THE GREAT SASKATCHEWAN PLAINS

At From \$8 to \$10 an Acre

Rich, Virgin Prairie, Deep Loam Soil, Clay Sub-Soil well adapted to diversified farming. This is the best undeveloped prairie land on the continent, and the greatest Hard Wheat District in the world. Write for free maps, pamphlets, etc. Mention this paper and we will send you a copy of our 1906 "Bread Basket"

SASKATCHEWAN VALLEY & ALBERTA LAND CO. Ltd.

LARGEST LAND COMPANY IN THE WORLD

Head Office: Canadian Northern Building. WINNIPEG, CANADA
A. R. DAVIDSON, Vice-Pres. A. D. McRAE, Secy-Treas.

Getting What You Want

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and richest sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do. Send for our booklet. Write for particulars. It will pay you. Address LOS MOLINOS LAND CO., LOS MOLINOS, TEHAMA CO., CALIFORNIA.

AT KENNEWICK ON THE COLUMBIA.

The ideal climate, winters warm and balmy.

Under the Great Northern Pacific Canal.

The choicest irrigated land in the West.

Own a ten acre fruit ranch and be independent.

Why work for others; be brave and do as thousands have done before you. These men have not made a mistake in coming here, many are independent.

We produce the earliest fruit, berries and grapes grown in the West.

It is all that we claim for it. Write to

KENNEWICK LAND CO., - - - KENNEWICK, WASHINGTON.

NAMPA, IDAHO

A railroad center of Southern Idaho, surrounded by 300,000 acres of magnificent farming and fruit lands. Only one-fourth of these lands are under cultivation. The UNITED STATES GOVERNMENT has appropriated \$11,000,000 to develop the water supply and work will begin in February this year. A beet sugar company has secured contracts on 6,000 acres of land and are now erecting a \$1,126,000 factory within the city limits and will handle the crop of 1906. We have just built an alfalfa meal plant to grind up the surplus hay and ship it away in sacks. A brewery company has just secured a site and will put up a \$40,000 plant. This will help the hop industry. A flour mill company is seeking a site and one will soon be located. You can not fail to see that all of these enterprises locating at the same time in a town of about 3,000 people will double and thruple its population in the next two or three years. We raise 5 to 8 tons of alfalfa per acre, 300 to 500 bushels of potatoes, two crops of timothy and clover, 20 to 60 bushels of wheat, 60 to 100 bushels of oats, 60 to 70 bushels of barley. All fruits raised to perfection. Write the NAMPA CHAMBER OF COMMERCE.

WE GIVE YOU TEN YEARS TIME

In which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low interest. Write for full information. FREE.

THE UNION PACIFIC LAND CO.,
Department F, Omaha, Nebraska.



FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

TREES THAT ARE CHEAP In price and of the best quality, free from disease and true to name. Complete assortment. Due bill good for 25¢ and catalogue free. Freight paid on \$100 orders. FAIRBURY NURSERIES, Box L, Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES Small Fruits and Evergreens. Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigreed and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois

Buy Your Trees Direct

WHOLESALE and save agents' commission of 40 per cent. **PRICES** We have direct connections with all points in Kansas, Missouri and the Southwest, and deliver all orders promptly and in good condition. Our stock is "True to name" and especially adapted to these localities. Write for wholesale price list. Wichita Nursery, Box B, Wichita, Kansas.

HARDY EVERGREENS
We grow them by the million. To prove they are healthy and vigorous we offer 12 Spruces and Pines 2 years old FREE to property owners. Mailing expense 6c, which send or not. A postal will bring them. Catalog with 43 colored plates of Hardy Fruits etc., free. Write today. The Gardner Nursery Company, Box 740, Osage, Ia.

Iowa Produces the Best
SEED CORN

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 54, Farragut, Iowa.

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo.

GOOD SEEDS CHEAP
BEST EVER GROWN
A wonderful big catalog FULL of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds.

Big Lot of Extra Packages Free to Every Customer. Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

Seed Potatoes
To Grow Big Crops and best potatoes plant our Red Rover Green Stock. They are unsurpassed in quality and early maturity. Our Stock is the largest and prices lowest. Our Big fine Illustrated Catalog is FREE; gives prices and descriptions of every seed that grows. Send for it; a postal card will bring it to your door. Address, RATEKIN'S SEED HOUSE, Shenandoah, Iowa. (The largest Seed Corn Growers in the World.)

SEED CORN
There are many points to be considered in selecting seed corn; some of the most important are outlined in the above cuts; namely, well filled out at butt end with small to medium sized shank; the tip of ear well capped or covered over with fair sized grains, the kernels should be wedge shaped from cap to where it rounds off at point or germ end, and the rows should be close together but still not so tight as to smother the germ and cause mould. The grain must be deep and set on a small cob which is of such texture that it will dry out easily and quickly. These points are all brought the nearest to perfection in the new

GOLDEN WEST

It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue, illustrating and describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seeds. Mailed free if you mention this paper.

IOWA SEED CO., DES MOINES, Ia.

Horticulture

Manchurian Walnut.

EDITOR KANSAS FARMER:—Is the Japan walnut hardy in this State? Has any one tried the Manchurian walnut in this State? WM. H. EDMISTON.

Lyon County.

Mulching Grapevines.

EDITOR KANSAS FARMER:—I mulched my grapevines for two years. Will it do to keep on mulching them year after year on top of old mulching? I use wheat straw and spoiled hay.

Will some of the readers of the KANSAS FARMER give me the desired information?

McPherson County. B. REICHERT.

We do not think it advisable to mulch grapevines heavily and continuously, but where they have been mulched so long it is doubtful if a change would be desirable. Prof. H. E. Van Deman says of grape culture: "If you mulch once you must keep it up; mulching brings the roots near the surface and if removed is certain death."

If mulching is discontinued, great care should be taken until a set of fibrous roots is established deeper than you have them at present. Very shallow and frequent cultivation, so as to preserve moisture, would be best; otherwise, dry weather might seriously injure your vines before a normal condition of roots is established.

WALTER WELLHOUSE.

Catalpa Seeding.

EDITOR KANSAS FARMER:—When and how should catalpa seed be planted?

Reno County. B. A. E.

We can not do better than to quote Mr. John C. Teas, a gentleman who has had a wide experience with the catalpa:

"Catalpa seed is very light and thin and does not require soaking, freezing or other preparation as other seeds do. The best time to plant is after the ground has become somewhat warmed by the sun and spring frosts are mostly past—say April or May. The ground should be made mellow and smooth by plowing and harrowing, and laid off in drills about an inch deep and three and one-half or four feet apart—unless it is a small lot to be worked by hand, when the rows may be about two feet apart; in larger lots, most of the work can be done with horses and cultivator. The rows should be laid off straight, by line, both for appearance and convenience in cultivation. The drills may be made with a corn-marker, laying off two or three rows at a time; for a small patch the corner of the hoe answers very well.

"Choose a still day for planting, or if obliged to plant in windy weather the seeds must be wet or they will blow away before you can cover them. After wetting we sift dry dirt among them to prevent their sticking together. The seed may be strewn along pretty thick in the drills and carefully covered with fine dirt, scarcely an inch deep. In lighter or sandy soil they will, of course, bear to be covered deeper than in heavy clay. A dozen little trees coming through the ground together, can by their united strength heave up and break the crust, where one or two would fail to get through and thus perish. If they come up too thickly, they may be thinned and transplanted in damp weather as readily as young cabbage plants.

"The ground should be firmed in the rows after the seed is planted, and if dry weather follows planting, we would water them." WALTER WELLHOUSE.

40,000 Apple Trees.

A fine lot of Jonathan and Missouri Pippin 4 to 6 feet high, for sale at Wellhouse orchard. Address H. S. Bullock, Tonganoxie, Kans. Price 4 to 8 cents.

Spraying of Fruit Trees.

E. L. STEPHENS, CRETE, NEBR.

WHEN TO DO IT. WHAT TO DO.

So many inquiries regarding how and when to spray are coming in our mail that it seems wise to answer through a newspaper article. Not many years ago fruit-growers were saying to each other, "Is it worth while to spray? Do the benefits exceed the expense and trouble?" Now the question has changed and is "how must we spray to secure the best results?"

In all of the older districts of the State unsprayed orchards have a large percentage of wormy fruit and many of them are subject to fungus diseases. We are now compelled to face the problem of how best to guard against the codling-moth and the equally difficult

question of how to combat and control fungus diseases.

The increasing humidity of our climate favors the production and rapid dissemination of fungus spores. Fortunately Bordeaux mixture used in combating fungus diseases may be combined with the arsenical poisons used in destroying the larvae of the codling-moth. Labor is saved by combining both in one application.

CODLING MOTH.

In order intelligently to direct our attempts to destroy the larvae of the codling-moth we must know something of its life history. This insect winters in a pupa form in a silken cocoon or covering. It usually seeks shelter under the rough scales of bark on the older trees and in numerous other places. The time of development of the moth the following spring varies greatly with the warmth of the weather and the nature of its hiding place. Nature teaches the moth to remain dormant until the warmth of the spring has brought orchards into bloom.

Researches made at our Nebraska Experiment Station indicate that the moths deposit their eggs chiefly upon the upper side of the leaves, occasionally on the apples. These eggs hatch in eight to ten days, according to the weather. The larva when it emerges is about an eighth of an inch in length, its head being the most prominent part. It soon begins to seek for an apple on which to feed and for a hiding-place in which to protect itself from its enemies.

The examination of a large number of apples indicates that 80 per cent of the larvae enter the apple at the base of the calyx lobes which have already closed, thus preparing a convenient cover until it can work its way into the fruit. The larva soon reaches the center of the apple, attaining full growth in ten to fourteen days. It then hunts for a convenient hiding place in which to spin its cocoon. This habit leads to the banding of trunks of trees which will be explained later.

WHEN TO SPRAY.

Since the eggs are not deposited until a considerable period after the bloom has fallen, it is unwise to spray while the trees are in bloom. There is nothing to be gained by spraying while the trees are in full bloom, since that is a number of days in advance of the appearance of the larvae and is dangerous to bees working in the blossoms.

Carefully conducted tests at the Illinois Experiment Station also show that to spray while the apple is in bloom interferes with pollination. Hence it is better to wait until the petals have fallen and pollination has taken place, spraying just before the calyx closes.

Since eighty per cent of the larvae enter the apple at the base of the calyx our opportunity for destroying this percentage lies in placing some insecticide within the calyx of the apple before it has completely closed. This allows us from four to six days time between the falling of the petals and the more or less complete closing of the calyx which prevents the lodging of the poisons therein.

As all varieties do not bloom at the same time, commence by spraying the early blooming varieties and close with those which bloom later. The Genet, popularly known as Janet or Jeniton, blooms ten days later than the early-blooming varieties. The success of this spraying depends on its thoroughness, it being by far the most important of the entire season since all the larvae which escape at this period pupate and produce the second brood of moths, which is much more difficult to control than the first.

The next spraying should be done within ten days thus serving as a check to overcome the defects of the first application and also to destroy the later larvae of the first brood.

The third spraying should be, for the latitude of Lincoln, Neb., about the later days of July, aiming at this time to destroy some portion of the second brood. Should the orchard be suffering from canker-worm or bud-moth it may be necessary to make an earlier spraying just before the blossoms are showing a tinge of pink and before they open.

WHAT TO USE.

Within the last three years our most careful scientists and successful orchardists have been experimenting with arsenate of lead and Disparane. These two poisons are said to be nearly alike in their composition. Disparane is composed of sugar of lead and soda arsenate.

Very careful tests in Colorado have shown three sprayings with Disparane to be more effective than four or five applications of Paris green. Arsenate of lead and Disparane in composition

STARK FRUIT BOOK shows in NATURAL COLORS and accurately describes 218 varieties of fruit. Send for terms of distribution. We want more salesmen.—Stark Bros., Louisiana, Mo.

Seed Oats

50c a bushel and up. The cheapest, heaviest, best yielding Oats are Ratekin's Reliable Grown, pure stock, Ratekin's New Sensation, Early Champion, White Russian and Texas Red Rust proof. Write for big catalogue, gives full descriptions of these oats, and all farm seeds, free. A postal will bring it. Address Ratekin's Seed House, Box 19, Shenandoah, Ia.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

50 BULBS
25 Cents.
Will grow in the house or out of doors. Hyacinths, Tulips, Gladiolus, Crocus, Fuchsias, Oxalis, Tuberoses, Begonia, Jonquils, Daffodils, Chinese Lily, Dewey Lily, Gloxinia, Lilies of the Valley—all postpaid, 25c. in stamp or coin. As a premium with these bulbs we will send FREE a big collection of flower seeds—over 200 kinds. HILLSIDE NURSERY, SOMERVILLE, MASS.

All Seed Risks
are covered by our three warrants. By this we mean that **GREGORY'S SEED** shall always be fresh, pure and reliable. Our free catalogue also contains a lot of valuable farm and garden facts. J. J. GREGORY & SON, Marblehead, Mass.

ARDEN SEED FROM A GARDENER
If you want to have the finest market garden you ever grew, get your seed of a market gardener.
HENRY FIELD is a successful market gardener as well as a seedsman. He tests all the seed in his own garden before he offers a grain of it for sale. He doesn't claim all kinds of impossible things for his seed. He's honest in his statements and pictures and you'll appreciate his way of treating you. Write for the catalogue today. It's free.
HENRY FIELD, Gardener and Seedsman, Box 55, Shenandoah, Iowa.

15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer that will flower for the next 10 years with plenty of beautiful flowers.

1 Clump Mixed Phlox	All Colors, 25c
1 Clump Hollyhocks	" " 25c
1 Clump Mixed Sweet Williams	" " 25c
1 Clump Mixed Baby Breath	" " 25c
1 Clump Mixed Ragged Robin	" " 25c
1 Clump Mixed Crysanthemum	" " 25c
1 Clump Mixed Dianthus Pinks	" " 25c
1 Clump Mixed Golden Glow	" " 25c
1 Clump Mixed Poppy	" " 25c
1 Clump Mixed Climbing Heart	" " 25c
1 Clump Mixed Coreopsis Harvest Moon	" " 25c
1 Clump Mixed Heliotrope	" " 25c
1 Clump Mixed Dahlias	" " 25c
1 Clump Mixed Hardy Aster	" " 25c
1 Clump Mixed Hardy Iris	" " 25c

This entire collection, worth \$5.00, for only \$2.00.

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, MALDEN, MASS.

HEALTHY TREES Honest in quality. Grafted Apples \$1.00. Budded Cherries, 15c each; good varieties. Concord Grapes, 62 per 100; black Locust and Rhus Mulberry, 61 per 1000. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.

"For Goodness Sake"

Plant our Choice Iowa Seeds
They Are GOOD.

Located in the best seed growing district of the United States. Established 36 years. Our seeds are used annually in more than half a million gardens. Our large descriptive catalogue describes all the most desirable novelties and standard sorts of Vegetable, Flower and Farm Seeds, Plants, etc. Mailed Free if you mention this paper.

IOWA SEED CO., Des Moines, Iowa.



High-Grade Flower Seeds.

20 Packages FOR 10c.

KINDS.	KINDS.	KINDS.
Bat. Button,	Poppy,	Portulaca,
10 Weeks Stock,	5 Candytuft,	10 Marigold,
Eschscholtzia,	6 Aster,	10 Pansy,
Sweet Alyssum,	Zinnia,	12 Sweet Peas,
Sweet William,	8 Balsam,	12 Pinks,
	10 Larkspur,	6 Petunia,
	10 Nasturtium,	10 Calliopsis,
	10	8 Sweet Mignonette.

All of the above sent to any address, post-paid, for 10c. silver or six two-cent stamps. As a premium to introduce our seeds into every household, we will also send a collection of fine beautiful bulbs FREE with Catalogue.

Somerville Nursery,
SOMERVILLE, MASS.



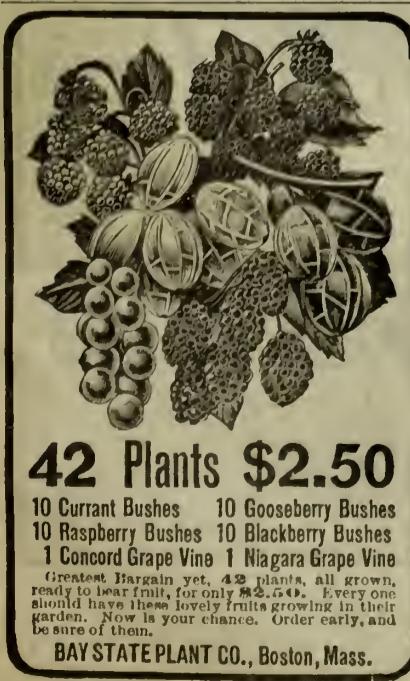
20 HARDY PLANTS \$5.00

Shrubs and Running Vines

1 Syringa (Lilac)	1 Rhododendron
1 Japan Snowball	1 Azalia Mollie
1 Double Aithea	1 Weigela
1 Double Flower Almond	1 Rose of Sharon
1 Hardy Hydrangea, 4 ft.	RUNNING VINES.
1 Syringa Mock Orange	1 Japan Honeysuckle
1 Rhue Purple Fringe	1 White Star Clematis
1 Forsythia Beautiful	1 Dutchman Pipe
1 Lilac, white and purple	1 Ampelopsis
1 Bentzia	1 Boston Ivy
1 Bridal Veil	

20 Hardy Plants from 4 to 5 ft. tall. This entire collection, only \$5.00. Send your order early and we will send this fine collection, worth twenty-five dollars, enough plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.

NATIONAL PLANT CO., Somerville, Mass.



are very much like white lead. Their great adhesive qualities make them superior to Paris green and all other insecticides. These poisons have the further advantage that they are not likely to burn the foliage.

Two pounds of arsenate of lead or of Disparcine used with fifty gallons of water are considered more effective than usual applications of Paris green, London purple or arsenate of soda.

BANDING THE TRUNKS.

After attaining its full growth in the apple, the larva either falls to the ground with the apple and seeks some hiding place in which to pupate, or if the apple remains on the tree, the larva crawls down the limbs and trunk seeking some possible shelter from the birds. Many of them hide under loose scales of bark or in crevices. The orchardist, taking advantage of this effort to hide, bands the trunk of the tree using either burlap or paper. These bands should be six to eight inches in width and should encircle the trunk midway between the ground and the main limbs. These bands may be fastened with a couple of tacks.

Since the pupa changes to a perfect moth in about eight days the bands must be examined and the larvae and pupae destroyed as often as once in seven days. The bands are then replaced. The first application should be made about the middle of June and continued until early September. Since it is not possible to destroy all of the larvae by spraying for the first brood it seems wise to make an effort to entrap the small percentage that have escaped and thus lessen the number of the second brood.

FUNGUS DISEASES.

As long as our climate was comparatively dry we had little trouble with fungus diseases. At this time in Eastern Nebraska the humidity of the atmosphere has changed and is similar to that of Missouri and Illinois. Many of our orchards are now seriously troubled with apple scab. These fungus diseases affect the foliage, weakens the stems and sometimes almost destroy the apple crop. This is checked by the use of Bordeaux.

The spores of the apple scab winter over and attack the foliage in early spring. After the fruit has formed the scab may fasten itself on the apple. Effectiveness in spraying for fungus diseases depends upon preventing the germination of the spores.

We make the first application in the latter part of March with the intention of destroying fungus spores which have been carried over winter on the trees. The second application may be made just before the blossoms open. This may be combined with an insecticide in case the orchard is troubled with the canker-worm or bud moth.

The third spraying should be made just after the blossoms fall and is combined with the principle spraying against the codling-moth. It is wise to make another application ten days later and still another may be made about two weeks later. Wet seasons and humid climates require a greater number of applications than dry seasons and semi-arid conditions.

Bordeaux mixture is ordinarily composed of four pounds of sulfate of copper and four pounds of caustic lime to fifty gallons of water. The later sprayings with Bordeaux should lesson the amount of sulfate of copper to two and a half pounds to the fifty gallons of water since when applied in full strength it checks development of the apples and gives them a russet appearance.

CONCLUSION.

In combating both the codling-moth and fungus diseases it is necessary to spray at least four times. The first spraying is applied before the lead-buds open and is distinctly a fungicide. The second spraying is applied just before the blossom-buds open, using Bordeaux with the addition of an insecticide to destroy the bud moth and canker-worm.

The third spraying, using Bordeaux and insecticides combined, is doubtless the most important of all and is applied just after the petals have fallen and before the calyx closes. This application should be most thorough.

The fourth spraying, of the same composition as the third, should be a week later and is chiefly to remedy the defects of the previous application. It however, also furnishes an additional supply of poison for the later larvae just hatching. In wet seasons it seems wise to make the fifth application. The copper sulfate, however, should be reduced in quantity, the arsenical poisons remaining the same as before. This is intended to check the second brood.

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are thoroughly tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices.

GARDEN CITY, KANSAS

ALFALFA SEED

Kansas Grown. Non-Irrigated. From grower to consumer. Write for prices.

MEADE, KANSAS

SEEDS

DIRECT TO CONSUMER—LOOK AT THESE PRICES: Red Clover per bu., \$5.50; Alfalfa Seed, per bu., \$8.25; Timothy Seed, per bu., \$1.65; Fancy Kentucky Blue Grass Seed, per bu., \$1.75; Millet, Cane, Kafir Corn. Everything for Farm and Garden. Also Poultry Foods, Oyster Shell Grits, Cracked Bone, etc. Seamless bags, 20 cents each. Low prices and choice goods. Write me.

T. LEE ADAMS, 417 Walnut St., Kansas City, Mo.

SEEDS

FIELD, GARDEN, FLOWER EVERYTHING for the Farmer or Gardener

Planet Jr., Garden Tools, Seed Sowers, Bale Ties, Onion Sets, Large Stock Clover, Timothy, Alfalfa, Millet, Cane, Kafir Corn, Potatoes, Blue Grass, Orchard Grass. Write for FREE catalogue.

MISSOURI SEED CO., 1427 ST. LOUIS AVE., KANSAS CITY, MO.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds FIELD and GRASS SEEDS. Write me.

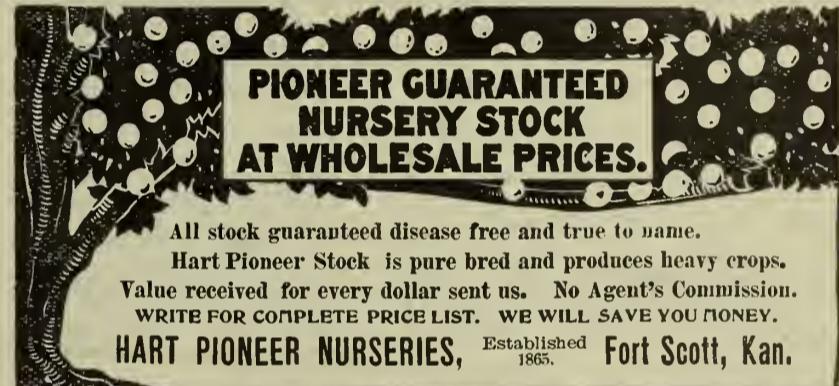
KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

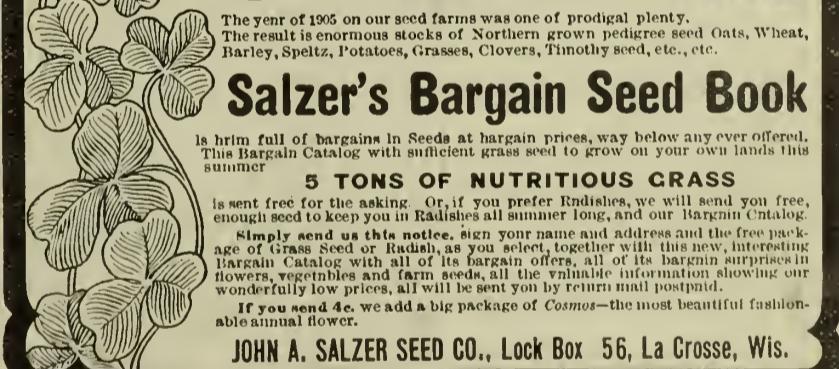
La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.



5 TONS OF GRASS FREE AND BARGAIN LIST



JOHN A. SALZER SEED CO., Lock Box 56, La Crosse, Wis.

HARDY ROSE BUSHES

Live Out Doors, Summer and Winter.

10 ROSE BUSHES \$1.50

- 1 General Jacqueminet (Brilliant Red).
- 1 Americana Beauty (Red). Beautiful.
- 1 Magna Charta (Pink). Extra.
- 1 Mrs. John Lang (Soft Rose).
- 1 Ulrich Brunner (Cherry Red).
- 1 Pearl des Blancho (White).
- 1 Moss Rose (Bennet Red).
- 1 Celine Forester (Yellow). Fine.
- 1 Sweet Briar (Sweet Scented).
- 1 Crimson Rambler (Large, Beautiful, Running Rose).

Ten of the choicest varieties, 3 and 4 years old Rose Bushes, only \$1.50. The regular price for these bushes is seventy-five cents each. This is a great bargain. You will notice that this collection has very choice, beautiful shades. All green, packed in moss. True to name. Do not miss this grand offer.

ORDER QUICK, and get this fine Collection Imported from Holland. These bushes are grafted. They will flower this year.

WAYSIDE NURSERY, Somerville, Mass.

POULTRY BREEDERS' DIRECTORY.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

FOR SALE.—Silver Laced Wyandottes, White Plymouth Rocks and Partridge Cochins. Fine stock, each raised on a separate ranch. Eggs, per sitting of 15. \$1. Letters promptly answered. Address W. C. Koenig, Nortonville, Kan., First Nat'l Bank Bldg.

BARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Galbraith, White City, Kansas.

BUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmans, M. B. turkeys, and Toulouse geese. From prize-winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovett, Proprietor, Mulinville, Kansas.

R. C. RHODE ISLAND RED EGGS—Farm range, \$1.00 per 16; pen, \$2.00 per 16. L. W. Pulten, Medora, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cottou, Stark, Kans., 225 Main Street.

S. C. B. LEGHORNS, 15 pure-bred cockerels, \$1.00 each. Eggs for sale. I took first at State Poultry Show. Mrs. Siler Seal, Meriden, Kansas.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandalia, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, peacocks. Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and Brown Leghorns, White, Buff and Silver Laced Wyandottes. Games, Golden Seabright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs, 15 for \$1. Write D. L. Bruen, Plate Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs, 5 cents each. \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years' breeder of the choicest birds. Eggs \$1.50 per 15. Member American White P. R. Club. J. E. Shinkin, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen, No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Kans.

PURE Single Comb Brown Leghorn eggs; 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

BLACK LANGSHANS—Hens scoring 92 and upwards—heeded by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs \$2 for fifteen; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kans.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kans.

FOR SALE—4 pair of White China geese; 3 Bronze turkey toms. Mrs. W. J. Grist, Ozawkie, Kans.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kans.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds; farm raised. White Rock eggs, \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kans.

PURE-BRED Barred Plymouth Rocks at reasonable prices. J. A. Sawhill, Edgerton, Kans.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 15. T. J. Sweeney, Route 2, Maple Hill, Kans.

FOR SALE—Young M. B. Turkey toms from high-scoring, prize winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minoras, \$1 per 15. Virga Bailey, Kinsley, Kans.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kans.

MAMMOTH BRONZE GOBLERS—Extra nice large young toms, \$5 each. Buy one to improve your flock. C. E. Durand Plantation, Hutchinson, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. B. Bronze turkey eggs, 11 for \$3.

CHOICE B.P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes; \$1 per 15. W. H. turkeys, \$1.50 per 9. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kans.

FOR SALE—Exhibition S. C. Black Minoras cockerels, \$2. I guarantee them. Address George Korn, 817 Osage street, Leavenworth, Kans.

STANDARD BREED SINGLE COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First Street, Newton, Kans.

S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Ave., Topeka, Kans.

BARRED AND WHITE PLYMOUTH ROCK eggs, \$2 per 15; \$5 per 45. Hawkins and Bradley strains, scoring 93% to 94%. Mr. and Mrs. Chris Bearman, Ottawa, Kans.

FOR SALE—Choice S. C. B. Leghorn cockerels, \$1 each. J. N. Sheldon, Route 1, McPherson, Kans.

of codling-moth and to assist in checking fungus diseases.

Banding the trunks has proven a useful adjunct when the orchardist can find time to give the additional work.

Results obtained and the satisfaction derived from spraying depend very largely on its thoroughness. By all means spray with system. Do not miss even a small branch. Remember that one moth lays three hundred eggs and that one small area of fungus growth will, under favorable conditions, give off spores enough to infect the entire orchard.

The Poultry Yard

Hints to Poultry Raisers.

One of the most valuable publications about to be issued by the Department of Agriculture is by G. Arthur Bell, Assistant Animal Husbandman, Bureau of Animal Industry, entitled "Hints to Poultry-Raisers." Following are excerpts from the same:

"In selecting a variety of fowls, it is desirable to obtain only pure-breds, as with these one has a flock of fowls which will produce carcasses and eggs of a much more uniform shape, color, and size than mongrels will produce, all of which will aid in finding a ready sale. If one has a flock of mongrel fowls and can not afford to buy pure-breds, he should choose a pure-bred male bird of the breed preferred and mate him with a few of the best mongrel females. This system, if carefully followed a few years, will give a high-grade flock that will be practically as good as pure-breds, so far as market conditions for dressed fowls and eggs are concerned."

"Choice of a variety will depend largely on the purpose for which the fowls are kept—whether eggs alone, both eggs and meat, or meat alone is the chief object; whether white-shelled or brown-shelled eggs are desired; and whether sitters or nonsitters are wanted. These are divided into the following three classes:

"Egg breeds.—Nonsitters and producers of white-shelled eggs—Leghorns and Minorcas.

"General-purpose breeds.—Sitters and producers of brown-shelled eggs—Plymouth Rocks, Wyandottes, Orpingtons, and Rhode Island Reds.

"Meat breeds.—Sitters and producers of brown-shelled eggs—Brahmas, Cochins and Langshans.

"POULTRY-HOUSES.

"In selecting a location for poultry-houses, it is desirable to place them on an elevation having a natural drainage away from the building. A dry, porous soil, such as a sandy or gravelly loam, is preferable to a clay soil. As sunlight and warmth are essential to the best success with poultry, the buildings should face south. A southeastern exposure is preferable to a southwestern one of a direct southern exposure can not be obtained. The size of the house will depend almost entirely on the number of birds to be kept. If the birds are kept in flocks of forty to sixty, about 5 square feet of floor space should be allotted to each hen. The building should be high enough to enable the attendant to avoid bumping his head against the ceiling.

"The best house for fifty to sixty fowls is 20 by 14 feet; front elevation 6½ feet, back elevation 5½ feet, with double pitch roof of unequal span. The roof, if it is shingled, should have not less than one-third pitch. If roofing paper is used, one-quarter pitch will answer. In the front or south wall there should be placed two windows about 1 foot from the top and 3 feet from the ends; 8 by 10 inches is a good-sized pane to use in a twelve-light sash, making the sash about 3 feet 9 inches high, and 2 feet 5 inches wide. A door 2½ by 6 feet may be made in one of the end walls, and also a small door in the front wall, for the fowls to pass in and out of the building.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The feeding platform should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

"The roost platform should be placed in the rear of the house, extending the whole length. The platform should be about 3 feet wide and 3 feet above the floor, and the perches should be placed about 8 or 10 inches above the platform. The nest should be placed against the end of the house opposite the door or under the roost platform, and should be darkened. Several small boxes for shell, grit, beef scraps, etc., should be placed against the walls about 16 or 18 inches above the floor. If cement or wood floors are used, a dust-bath should be provided for the fowls.

sary to have healthy, vigorous stock, properly fed. In order to do their best, hens should be fed grain food, animal food, and green food. They should be fed enough to keep them in good condition but not overfat, and they should be induced to take plenty of exercise. No set rules can be given for feeding, as conditions vary, and there are different methods of feeding different breeds.

"A good system to follow for winter feeding," the pamphlet continues, "is, mash once a day and grain scattered in the litter twice a day. The mash may be fed dry or slightly moistened. When fed dry it is usually put into a trough or hopper hung against the wall and the fowls allowed access to it at all times.

"The mash fed at the Maine Experiment Station is as follows, in the proportion indicated:

Two hundred pounds wheat bran; 200 pounds wheat middlings; 100 pounds gluten-meal; 100 pounds cornmeal; 100 pounds linseed-meal; 100 pounds beef scrap.

"Another mash may be mixed as follows, Iowa, in the proportions indicated: 100 pounds corn-meal; 100 pounds ground oats; 100 pounds wheat bran.

THE FEEDING OF YOUNG CHICKENS.

"Young chickens should be fed a little at a time and often. If they are given ground food alone, there is a great danger of over-feeding. Very good results may be obtained by the feeding entirely of cracked grains from the time the chickens are hatched until they reach maturity. There are on the market many prepared chick-feeds, consisting of different mixtures of cracked grains, which are very suitable. After the chickens are five or six weeks old, the prepared chick-feed may be dropped, and the chickens fed on cracked corn, cracked wheat, hulled oats, etc.

"If the chickens can not get grass, some kind of green feed should be provided. Lettuce and cabbage are very good for this purpose. Some kind of meat should be provided, such as green cut bone or meat scraps. Finely cracked grit should be kept in a box where the chickens can help themselves at all times. Water should be provided from the start and should be placed in such a dish that the chickens can not get into it and get wet."

Caponizing.

Please tell me through the KANSAS FARMER how to caponize and what age the chicks ought to be. V. M. Haskell County.

Ans.—It is an intricate operation to caponize a chicken, and to explain it in the KANSAS FARMER would take more space than could be afforded. Manufacturers of caponizing instruments furnish a book descriptive and illustrative of the operation and some can learn from these written directions; but the better way is to take lessons from an expert caponizer. The price of the instruments is \$2.50. Cockerels are caponized at from 3 to 5 months old.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of the Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of the Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in the Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Diseased Teeth.—My 4-year-old mare has a small growth on one side of the jaw, that has a small hole in it and a very small quantity of pus runs out. What is the disease and how shall I treat it?

SUBSCRIBER.

Roxbury, Kans.

Answer.—Your horse, from the symptoms you give, evidently is affected with a diseased tooth; take the animal to a competent veterinarian and have the tooth treated.

Scours in Calf.—My calf, 11 days old began to scour this morning and by evening was passing almost clear blood. We are feeding it by hand, and have given it new milk until last night—not from the calf's mother, but from a cow that has been fresh fourteen weeks. It ate heartily yesterday of alfalfa hay. I was surprised at this as it is so young.

A. W. G.

Answer.—You had better feed the

calf nothing but milk, and scald that before allowing the calf to drink it. Give a teaspoonful of listerine every two hours in half a pint of milk until you have given a teacupful of the listerine. I think this will stop the scours, and then be careful for a time that the calf does not overload its stomach.

Colt with Splint—Steer with Cough.—What is good to remove splints from a colt? The colt is 2 years old and has splints on both front legs. It is in good growing condition so I thought if the splints could be removed I would be glad. I have used no remedy. The splints are large and have been on quite a while.

My yearling steer has been running in stalk-field for some time, and when first noticed was getting very thin and had a cough. I took him up and tied him in the barn. He eats very little and slobbers a good deal and is very thin. He eats a little corn and passes water frequently. He has a small lump on one side of the jaw, which seems to be soft. I have used a blister, but it seems to do no good. What ails the steer?

G. L. G.

Maple Hill, Kans.

Answer.—Very little can be done for splints after they have become hard and fastened to the bone, but if taken as soon as formed can be rubbed down flat so that they will not show. The splint is a growth of bone between the main column bone and the splint bone, so it is not practicable to remove it.

Your steer seems to be all out of condition, and I would advise feeding him the following: One and one-half ounce of pulverized nux vomica, 4 ounces of iron sulfate, 6 ounces of pulverized glycyrrhiza root, 5 pounds of oil-meal. Give a heaping teaspoonful three times a day in ground feed.

Itch in Cattle.—Will some one give remedy for seab or itch in cattle?

Marion County. J. C. D.

Answer.—We have sent you under separate cover a bulletin describing the preparation and use of lime and sulfur dip, it being too lengthy to publish in this column.

Nervous Derangement.—I have a red 6-year-old cow that has queer spells. She will fall on her head when standing still; will go round with front feet while hind feet are still; was that way last year after calving for 3 months, then was all right, and became fat enough for beef, but when she calved again she lost 200 pounds in two weeks, and was the same as last year.

Lebanon, Kans. A. E. R.

Answer.—The nervous system has evidently been injured in the region of the cow's loins, probably during the act of calving, and it would probably be best when the cow makes a good recovery for you to let her go for beef, and not try to raise any more calves.

Lump on Calf's Head.—I have a valuable male calf that has raised a knot on top of his head by fighting. It feels hard and grisly, and grows larger. How can I remove it so that it will not injure his selling value? C. P. B.

Farmington, Kans.

Answer.—I would advise blistering with a fly blister the swelling on the top of the calf's head; put the blister on at intervals of about every three weeks.

Lame Mare.—I have a young mare that got a nail in her hind leg at the fetlock joint 2 years ago. She is very lame when first starting out, but gradually gets almost over it. A neighbor says the nail is in there yet. The leg is enlarged about one-half with an extra point at one place. She is a good breeder. Can anything be done for her at this time? D.

Marysville, Kans.

Answer.—There is evidently a bone lameness starting from the nail that you describe entering the fetlock joint. The enlargement of the leg is probably the growth of bone; I would advise your using a fly blister on the affected ankle and if you have a competent veterinarian in your locality would advise having the joint "flred" before applying the blister.

Mare With Scours.—My 4-year-old brown mare has had scours for the past three months. I have had her in stalk field most of the time, but she has been in stable last few weeks. What would you advise? H. B.

Everest, Kans.

Answer.—Your horse, from the symptoms you give, evidently is affected with a diseased tooth; take the animal to a competent veterinarian and have the tooth treated.

Scours in Calf.—My calf, 11 days old began to scour this morning and by evening was passing almost clear blood. We are feeding it by hand, and have given it new milk until last night—not from the calf's mother, but from a cow that has been fresh fourteen weeks. It ate heartily yesterday of alfalfa hay. I was surprised at this as it is so young.

A. W. G.

Answer.—You had better feed the

THE KANSAS FARMER

CONTAINS \$ MAKING INFORMATION FOR YOU

Will be sent free for the asking.

If you want broilers for the early market, when prices are high, read its Hints and Helps. See what it says about raising hens, if you want young pullets to lay next winter, when eggs are dear. There's money in fattened fowls for late summer and fall markets. The poultry business is one industry that is not overdone. We aim to put the you on right track to make money.

Our machines are scientifically correct. They are ahead in the percentage of eggs hatched and in ease of operation. They are made from carefully selected and seasoned lumber. We are not a new concern compelled to buy green lumber and make it into machines the next day. Our incubators will not warp or crack and be useless after the first hatch. They are built for service and use year after year. We put a good honest weight of copper into our boilers and tanks. Our doors fit and close tightly. Our regulator regulates. Our lamps burn clear and brightly. When you get the Victor you get the best—if it's any other you may be buying trouble. Write today.

GEO. ERTEL CO., Quincy, Ill.

Thousands of customers regularly get 90 and 95 per cent hatches from our machines, using no more eggs and oil than their neighbors who with other machines get 50 to 80 per cent. We pay freight and guarantee our machines as represented or money refunded. Established 1867.

ON CREDIT.

The Celebrated Century Incubators. Cash or easy monthly payments. We trust honest people living in all parts of the world. The first hatch pays for the Incubator, gives you large profits besides. Write for free catalogue of Incubators and Brooders.

CENTURY MFG. CO.
Dept. 531
EAST ST. LOUIS, ILL.

Queen

The "QUEEN" is not an incubator but the Incubator

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

\$645 NET PROFIT IN 5 MONTHS

Does it pay? That's what the prospective incubator buyer wants to know. We answer "Yes!"—and we prove it by letters like this.

Wichita, Kas., March 23, 1905.

Gentlemen: Beg to state, that with the five 150-Egg Sure Hatch Incubators I purchased, I have made seven hatches, hatching 4,200 chicks, in five months. Out of the \$4,200 expense aggregated \$430, leaving me a net profit of \$645. This is the only way of profiting by the investment for the market, yours truly, E. FULTON WEAVER.

Our 1905 machines are now ready for delivery. For further information, write to us ever been built. We have tested the "Sure Hatch" in every possible way, and we find that the percentage of chicks hatched is higher than ever before. 85 percent hatches and better are the rule. Improved ventilation system. Our new safety lamp is all that its name implies. Can't come apart. A wonderful oil-saver.

Sure Hatch on 60 Days Trial Let us send you our 1906 "Sure Hatch" on two full months' trial, freight prepaid, with the understanding that if not entirely satisfactory and superior to any other incubator on the market we will take it back and refund your money. Each machine guaranteed for five years. Write at once for special money saving proposition and large catalogue of Incubators, Brooders and Chick Feed. Address nearest office.

SURE HATCH INCUBATOR CO., Box G 42, Clay Center, Neb. Dept. G 8, Indianapolis, Ind.

Successful Incubators

Tried, proven under all conditions. They'll hatch the most and strongest chicks for you. Take no chances. Get Successful Incubators and Brooders and make failure impossible. Incubator and Poultry Catalog FREE. Booklet, "Proper Care and Feeding Small Chicks," 10c. 60c poultry paper one year, 10c.

Des Moines Incubator Co. Dep. 83, Des Moines, Ia.

40 DAYS FREE TRIAL IN YOUR OWN HOME

100-EGG GREAT WESTERN INCUBATOR
Most Perfect Incubator Made.

GUARANTEED FOR 10 YEARS

Shipped anywhere on 40 days FREE TRIAL. Test it thoroughly. If it does not hatch as it should—if not just as represented and satisfactory in every respect—you may return it at our expense. We assume all the risk. Large Catalog FREE.

GREAT WESTERN INCUBATOR CO.
923 Liberty St., Kansas City, Mo.

Take Your Own Time.

Old Trusty Incubator

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an Incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and good chicks—why it is so easy to operate—why it is so economical. It's sold on 40, 60 or 90 days trial, freight prepaid. Write to us.

M. M. Johnson Co.
Clay Center, Neb.

We Pay the Freight.

POULTRY FEEDING AND FATTENING

A handbook for poultry keepers on the standard and improved methods of feeding and marketing all kinds of poultry.

The subject of feeding and fattening poultry is prepared largely from the side of the best practice and experience here and abroad, although the underlying science of feeding is explained as fully as needful. The subject covers all branches, including chickens, rollers, capons, turkeys and waterfowl; how to feed under various conditions and for different purposes. The whole subject of capons and caponizing is treated in detail. A great mass of practical information and experience not readily obtainable elsewhere is given, with full and explicit directions for fattening and preparing for market. The broad scope of the book is shown in the following

TABLE OF CONTENTS

Thrifty Growth, Expert Chicken Feeding, Hroller Raising, Nutrition for Layers, Special Foods, To Finish and Dress Capons, The Art of Poultry Fattening, Lessons from Foreign Experts, American Fattening Methods, At Killing Time, Preparing for Market, Marketing Turkeys and Waterfowl, Finish and Shaping, Profusely Illustrated, 160 pages, 5x7 1/2 inches, cloth. Price 50 cents postpaid.

Kansas Farmer Company

Topeka, Kansas

Collections made in all parts of the United States. No fee charged unless collection is made.

HOME PHONES No. 1577

The Kansas Collection Agency

415 Kansas Avenue.

KANSAS

Special attention given to stock breeders neonates. Reference furnished on application.

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during vacation, taught in simple English. Diploma granted positive educational success. Ontario Veterinary Correspondence School, Dept. 17, London, Canada.

Dairy Interests

Kinds of Roughage For Cows.

What is the best feed for milch cows in winter where one has no alfalfa? Do you think millet hay, Kafir-corn hay and cane, with some corn-fodder and oats or barley hay (the hays all cut when the grain was in the dough), would be sufficient, or would it pay better to raise some other kind of feed or buy alfalfa at about \$4 per ton?

What other feeds could be raised that would be better? All of the above-named feeds do well here. Which do you think is the best and which should I raise the most for best results?

McPherson County. EARL MYERLEY.

Without alfalfa for roughage you will be compelled to purchase some concentrate rich in protein in order to have satisfactory milk-producing ration. The various hays and forage crops which you mention are all distinctly carbonaceous, the oat and barley hay being the richest in protein of any named. The farm-grown grains are likewise distinctly carbonaceous; consequently any combination which you could make would be deficient in protein, and such a ration will not enable a cow to produce milk in paying quantities. These various forage crops may constitute part of the roughage ration, but if you would produce milk economically I would advise you above all things to endeavor to raise alfalfa on your farm.

At \$4 per ton it will pay you to buy alfalfa of good quality. We are paying \$7 to \$8 per ton delivered at the college, and do not feel that we can get along without it even at that price. Well-cured and properly handled alfalfa hay contains almost as much digestible protein as wheat bran, which will cost you from \$15 to \$18 per ton at the present time. For an annual forage plant the cow-pea may be recommended for furnishing a large amount of protein, it being even richer in protein than alfalfa. The correspondence of Professor TenEyck in the KANSAS FARMER will give you information as to the growing and harvesting of cow-peas. For present use I would suggest

tioned I would prefer the oat and barley hay for the milch cows. If you have cows that are capable of producing a fairly good quantity of milk, it will pay you to give a grain-ration composed of corn-chop or Kafir-meal with about one-third bran by weight, unless bran is exceedingly high in price. Also bear in mind that you must observe what the cows are doing in the way of milk-production, and if the grain-ration is not being paid for, reduce it or cut it out altogether, only feeding grain to the cows which respond with an increased flow of milk. I will again urge you to study the alfalfa question and see if you can not secure a stand upon some field of your farm.

G. C. WHEELER.

Dairy Short Course.

FROM THE DAIRY DEPARTMENT, K. S. A. C.

This course opened Jan. 3 and closes March 22. It is given at a time of the year when work on the farm is least pressing, and is especially designed for young men who wish to fit themselves for up-to-date, practical dairying.

The college creamery is equipped with the latest and best dairy machinery and utensils. There are twelve different kinds of the best cream separators, four kinds of cream pasteurizers, five Babcock milk-testers, three different acid testers, and two cream-ripening vats, and each student has a special set of dairy instruments for testing adulterations in milk, acidity, per cent of fat, etc. The students not only learn to operate all of the machinery, but decide for themselves which is best adapted to their needs. Special emphasis is placed on dairy sanitation, and it has been frequently noticed, that where our students have been employed in creameries that were run-down and out-of-date, they were soon renovated and placed in a sanitary condition, and the products therefrom improved one to five cents per pound. Many of these boys, coming in from the farm, have had very little previous education, and consequently would not make rapid progress in books alone. In the creamery, however, they soon become interested, for they learn to act and think at the same time they are figuring the quantity of coloring and salt to use in a given amount of cream, testing a given

BEST OF SEPARATORS
ACTUALLY FREE
OF COST

This is really the fact in the purchase of a DE LAVAL CREAM SEPARATOR. Any reputable person may buy a DE LAVAL machine on such liberal terms that the machine actually pays for itself.

And it not only does this the first few months, in which it saves its cost, but goes on doing it for fully twenty years to come. In the face of these facts buying trashy "cash-in-advance" separators, or any other than the best, is penny wise, dollar foolish. Such machines quickly lose their cost instead of saving it, and then go on losing instead of saving.

There is no possible reason why any buyer of a Cream Separator should be content with less than the DE LAVAL and there never was a more promising time to make this most profitable of all farm investments.

Send at once for new catalogue and full particulars.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.

1213 Filbert Street,
PHILADELPHIA.

9 & 11 Drumm Street,
SAN FRANCISCO

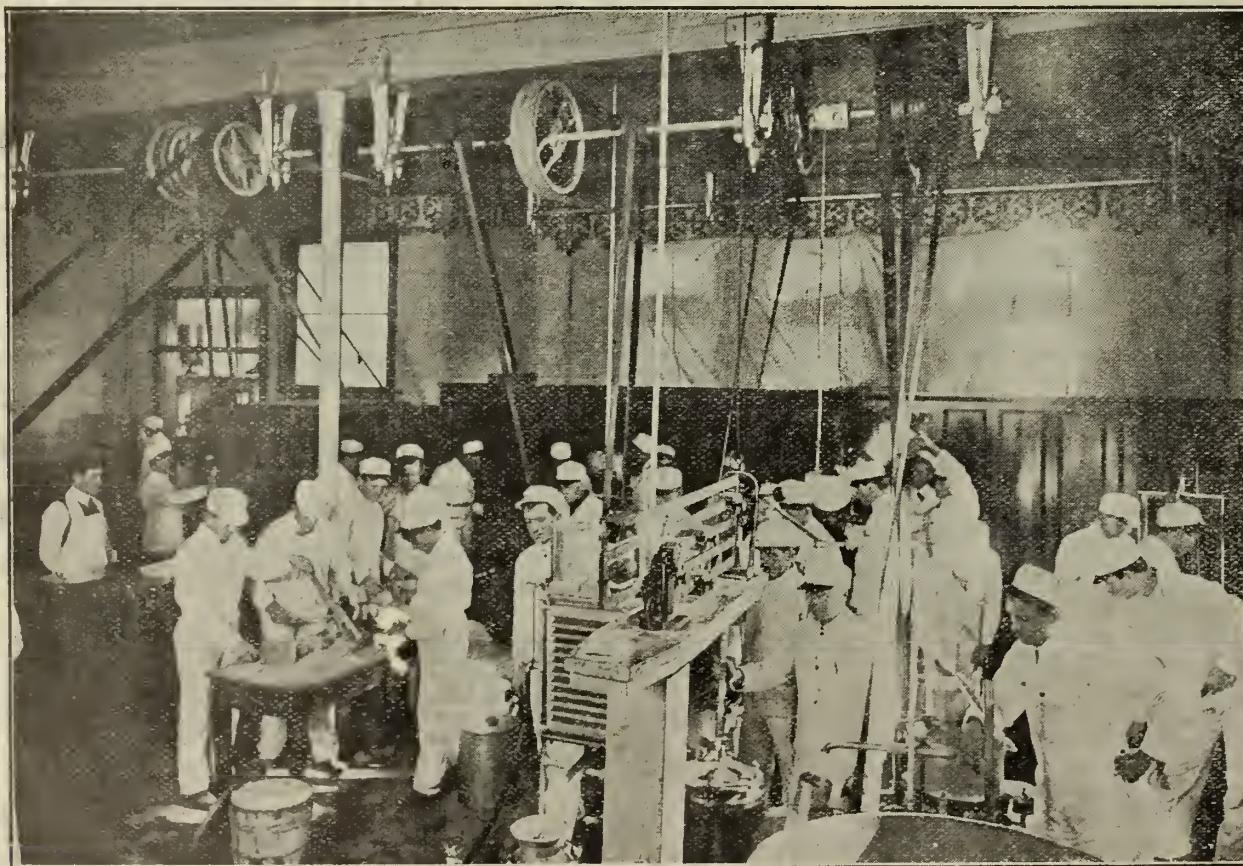
109-113 Youville Square
MONTREAL

75 & 77 York street,
TORONTO.

14 & 16 Princess Street
WINNIPEG.

most invariably succeed in the dairy, creamery, or wherever they are employed after leaving school.

The work includes the composition of milk; the function of each constituent;



STUDENTS OF THE SHORT COURSE AT WORK IN THE BUTTER-MAKING LABORATORY.

that you purchase some alfalfa hay, and if it is necessary to use up the other roughage feed by giving it to the milch cows, the alfalfa might be made only a part of the roughage ration. Of the various roughage feeds men-

per cent of butter-fat, or testing the various cream separators for speed, capacity, and cleanliness in skimming, etc.

This work appeals to the average of farmer boys; about 90 per cent of them make rapid progress in school and al-

cream separation; milk-testing; cream-ripening; making of starter from pure-culture, lactic acid bacteria; pasteurization; churning; control of ferments of milk; various kinds of cheese-making, both in the factory and on the farm; ice-cream making; creamery management; creamery bookkeeping; economy in the use of dairy machinery; effect of undesirable and desirable ferments, and dairy bacteriology.

The Silo.

It was not until the latter part of the 70's that the building of silos, intended for the manufacture of ensilage, began in this country. To-day silos are very common in the East, especially in the great dairy district of the Mohawk Valley, in New York, the Western Reserve of Ohio, and the Elgin district of North-

DAVIS
Get it direct from
factory at factory
prices and save
20% to 50%.
The simple cream separator
which doubles profits and cuts
dairywork in two. Absolutely
the simplest, easiest running,
easiest cleaned separator in the
world. Just belthigh to a man.
Its three-piece bowl gets the
last drop of cream. Investigate
our liberal selling plan. Send
your name and address to us on
a postal card and get our
money saving catalogue No.
125 by return mail.
Davis Cream
Separator Co.,
540 N. Clinton St., Chicago, Ill.

Convulsion,
Fits, then
Epilepsy.

Dr. Miles' Restorative Nervine has been so successful in curing these brain-wrecking diseases that there is every reason to believe that even the most hopeless cases can be benefited, if not fully restored.

We will be pleased to refer any one thus afflicted to many who now enjoy the blessing of health, after years of hopeless suffering.

"I have a son that had brain fever when two years old, followed by fits of the worst type, and he was pronounced incurable. I spent hundreds of dollars for him, without relief. After about fifteen years he became so bad that we sent him to Longcliff hospital for the Insane, at Logansport, Ind. He was there nearly three years, but he continued to grow worse, so we brought him home July 30, 1902, in an awful condition. He had lost his mind almost entirely. He hardly knew one of the family; could not even find his bed; was a total wreck. He had from 5 to 10 fits a day. We were urged to try Dr. Miles' Nervine, and before the first bottle was used, we could see a change for the better. We have given it to him ever since, and he has had but two very light spells since last August, 1903, and then he was not well other ways. We pronounce him cured, as he can work and go anywhere. If any one wishes to ask any questions concerning this, they are at liberty to do so."

H. H. BUNNELL, Lincoln, Ind.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

What You Gain

force, which is thousands of times stronger than the force of gravity that makes cream rise in pans. (2). One-half to twice as much butter, because Tubulars remove dirt and bacteria, thus making gilt-edge butter possible. (3). Half the work saved, because you finish skimming five minutes after milking, feed warm skimmed milk at barn, and have only the can of cream to care for. Write today for catalog W-165. It tells all plainly.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA. CHICAGO, ILL.

Sharples
TUBULAR
CREAM SEPARATORS

ern Illinois and Southern Wisconsin, in the latter State being as common as barns.

The silo as a means of preserving and storing feed has not as yet become a very important feature of Kansas dairying. But with the increase in population and steady rise in the valuation of land, the Kansas dairy farmer must look to methods whereby two cows can be maintained where but one was kept before, if he is to continue to reap a profit from his labor and investment.

Recognizing these facts, the Kansas State Agricultural College purchased, in 1902 and 1903, two 100-ton cypress-stave silos from an eastern firm. They were installed on the east side of the dairy barn, and what was then the farm department began a series of practical tests, performed by students, to determine the best and cheapest silage crops.

The siloing of feed compares favorably with the canning of fruits and vegetables. There are various feeds which can be siloed, but it has been definitely determined that Indian corn is best adapted for this purpose. However, alfalfa and cow-peas, or soy-beans are being siloed at the present time with great success. A mixture of alfalfa and corn, or soy-beans and corn, is preferable to either of these siloed alone, on account of the balanced nutrients which these feeds contain.

ADVANTAGES OF THE SILO.

The advantages of silos are numerous. The silo enables the farmer to preserve a larger quantity of the food material of the original fodder for the feeding the farm animals than is possible by any other system of preservation now known. Pasture-grass is the ideal feed for live-stock, but it is available in but few months in the year. The same is true of all siloing crops. When made into hay, the grasses and all other green crops, lose some of the food material contained in them on account of the loss of leaves and other tender parts, and on account of the fermentation that takes place while the plant is drying out or being cured. In the case of Indian corn the loss from the latter source is considerable, owing to the coarse stalks of the plant and the large number of air-cells in the pith. Under the best conditions, cured fodder-corn would lose at least ten per cent of its food-value when cured in shocks. Such a low percentage of loss can only be obtained when the shocks are cared for on the cutter, and put in the field under ideal weather conditions. In ordinary farm practice the loss in nutritive value will approach twenty-five per cent, and will even exceed this figure unless special precautions are taken in handling the fodder.

Compared with these large losses in food material in field-cured Indian corn, there is a comparatively small loss in the silo caused by fermentation or decomposition of the living plant cells as they are dying off. It has been frequently determined that the average loss of dry matter in the fodder-corn during the silo season does not exceed four per cent.

Summarizing the considerations concerning the relative losses of food material, as given by the various stations in field-curing and siloing of Indian corn, we may say that the latter, under favorable conditions, is far more economical than the former, and therefore a larger quantity of food materials is obtained by filling the silo with fodder-corn, than by any other method of preservation known at the present time. Besides this comes the great problem of succulence. All feeds of a succulent nature are more digestible and more palatable than dry feeds. We all know the difference between a juicy, ripe apple, and dry fruit. In the drying of fruits, as well as in the drying of corn-fodder, water is the main component taken away. This causes a loss of certain flavoring materials, which, though they do not count for much in the chemist's balance, are of the greatest importance in rendering food materials palatable.

The influence of well-preserved silage on the digestive system and general health of the animal is very beneficial. It is a mild laxative, and acts in this way very similarly to green fodder.

FILLING THE SILO.

The filling of silos is the all-important problem at the present time. As has previously been stated, corn is one of the best feeds for making silage. Corn should be left in the field before cutting until it has passed through the doughy stage, that is, until the kernels are well dentled and glazed. Where large silos are to be filled, and in case of extremely dry weather when

corn is drying up rapidly, it would be well to fill the silo a little before it reaches this stage, as a greater part of the corn would otherwise be apt to be too dry. There is, however, less danger in this respect now than formerly, on account of our modern deep silos, and because we have found that water applied directly to the fodder in the silo acts in the same way as water in the fodder, and keeps the fermentation in the silo in check.

The cutting of corn for the silo is usually done on small farms by hand. Many farmers have been using self-raking and corn-binding harvesters for this purpose, while others report good success with a sled or platform cutter. If the corn stands up well and is not of a very large variety, the end sought may be reached in a very satisfactory manner by either of these methods. If, on the other hand, much of the corn is down, hand-cutting is to be preferred. A number of different makes of corn-harvesters and corn-cutters are now on the market, and it is very likely that corn-cutting for fodder will be done away with in the years to come, at least on large farms.

After the corn is cut, a low wagon, with rack, is very essential for hauling the corn, for corn in the green state is extremely heavy and requires much energy to load on high wagons. The corn having been hauled from the field to the silo, has still to be reduced to a fine, homogeneous mass, convenient for feeding and economical as far as utilization for feed is concerned. In order to do this, the whole of the corn, ears and all, may be run through the ensilage-cutter. The corn is unloaded on a table and run through the cutter, after which it is carried through a tube by means of a blast of air, up into the silo window, and is delivered into the middle of the silo. If corn is siloed ears and all, it is necessary to keep a man or boy in the silo while it is being filled, to level the surface and tramp down the sides and corners. If left by itself, the heavier pieces of corn will be thrown each way and the light leaves and tops will come closest to the discharge, and as a result the corn will not settle evenly and the different portions of ensilage will have different feeding values. To assist in the distribution of corn a pyramidal box may be hung in front of the door and below the top of the carrier. This may be three feet square at the base, and taper to a point, at which a rope is attached for hanging to the rafter. The falling materials will strike the box and be divided so as to distribute to all parts of the silo. The proper distribution of cut corn, after it has been elevated and blown into the silo, is a matter that should have proper attention at the filling time. If the cut material is allowed to drop all in one place and then have no further attention, constant falling of the material in one place will tend to make that portion solid, while the outside will not be so. And besides this, the pieces of ears and heavier portions will continually roll to the outside. As a result the silage cannot settle evenly and good results will not follow. After the filling process, the cut material should be leveled off, and the common and most successful practice is to keep the material higher at the sides than in the center, and do all the tramping at, and close to, the sides, where the friction of the wall tends to prevent as rapid settling as takes place in the center. No tramping, or at least as little as possible, should be done except close to the walls. The weight of silage accomplishes more than any amount of tramping, and all that is necessary is to see that the silage is evenly distributed and to assist in settling by some tramping at the sides.

AFTER FILLING.

After the silo is filled the silage is left to settle. In the course of several weeks a layer at the top, approximately a foot deep, will begin to decay and mould and seal the rest from further decomposition. When feeding time comes this top layer is removed to a depth sufficient to reach pure silage. The silage in a silo is always more or less heated on account of the fermentative process, hence the top layer, which is cooled from one feed to another, should be raked off evenly and then fed.

Silage, the same as canned products, should not be exposed to air for too long a time, for decomposition takes place very rapidly.

Economy in the production of food material means an increased profit, hence as the price of feed advances on Kansas farms, the silo will become a necessary adjunct to the Kansas feeder.

SILAGE FOR MILK-PRODUCTION.

The principal lesson to be learned

GRAND SWEEPSTAKES CREAMERY SWEEPSTAKES DAIRY SWEEPSTAKES

OHIO
Grand Sweepstakes
Creamery Sweepstakes
Dairy Sweepstakes

WISCONSIN
Grand Sweepstakes

CONNECTICUT
Grand Sweepstakes

MAINE
Dairy Sweepstakes

The United States Separator Holds World's Record for Closest Separation of cream, and above is another of the many lists of victories which show that

The United States Separator Delivers the Cream in Smoothest and Best Condition to make the finest quality of butter.

Free catalogue on application.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

18 distributing warehouses throughout the U. S. and Canada. 434

at the Ohio State Dairymen's Convention held at Dayton Jan. 24-26. Creamery score 97 3-4, Farm Dairy 97.

at the Wisconsin State Dairymen's Convention at Waukesha Jan. 30-Feb 2. Score 97 1-2.

at Connecticut State Dairymen's Convention at Hartford Jan. 17-18. Score 98.

at Maine State Dairymen's Convention at Pittsfield Dec. 5-7. Score 97 3-4.

NEW BOOK

JUST ISSUED

SUCCESSFUL FRUIT CULTURE

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD,
Formerly Professor of Horticulture at the Massachusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, strawberry, blueberry, buckberry, subtropical fruits, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most successful methods of the present day, and is the most recent practical treatise on this important industry.

Illustrated. 5x7 inches. 205 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA,

KANSAS

BLAINE TO HEAVES

14 years old. One to two cans will cure Heaves. \$1.00 per can. Of dealers, or express pre-paid. Send for booklet. The Newton Remedy Co., Toledo, O.

NERVE-FORCE

DORMANT CIRCULATION

that rescue is assured only by re-establishing the CIRCULATION of BLOOD by outwardly charging the controlling Battery-Cells with an element imitating the nerve-force prepared for that purpose by Nature from food and air. This imitative-element is our own faithful NERVE-FORCE and it will positively re-establish the most sluggish CIRCULATION to normal; it replaces in the hands of Nature the reins which control the Valves of the Veins, the uncontrolled lassitude of which is alone responsible for the inroads upon Health and Life of the deadly satellites of sluggishly moving Blood. If the Vital Organs are intact this consummation means full restoration even in greatly complicated cases. In fact the disentanglement of fatal Symptoms is only possible by thus unlocking Nature's Life-current from the outside. By the Twenty years of uninterrupted Success we have had in Life-saving, while Tens of Thousands have died under less rational "Systems" of cure, we prove our Method practical and absolutely correct and our NERVE-FORCE the KEY. Our cures include PARALYSIS, ATAXIA, PROSTRATION, NERVE DISEASES, NEUROSTHENIA, INSOMNIA, CONSTIPATION, CATARRH, DEBILITY, NEURASTHENIA, OBESITY, INDIGESTION, RHEUMATISM, GOUT, URICACIDEMIA, BRIGHT'S DISEASE, DIABETES, TUMORS, STRICTURE, APPENDICITIS, ANEMIA, VARIX, VARICOCELE, SPERMATORRHEA, SEXUAL DECLINE, KIDNEY, BLADDER, PROSATIC, LIVER, LUNG, THROAT and STOMACH Troubles, as well as all Troubles peculiar to Women. And yet it is not a "cure-all," its usefulness being limited to Troubles born of DORMANT CIRCULATION, nearly all of which would come under the head of the one above-named Symptom, "CATARRH." It is fatally unreasonable to attack these complications by pouring drugs into the stomach, which but spur or coddle the Vital Organs; it is unreasonable to "cut" the anguished Flesh in "Operations." Do you not consider a Method that for over Twenty years has saved its little World from these worthy of your perusal? Then please send for our free Data to-day. It comes to you in a plain envelope and its possession entitles you to our free work upon your case in Diagnosis. You will be surprised over the fund of useful information our NERVE-FORCE Publication conveys, and the exactness of our work in Diagnosis.

CORWIN NERVE-FORCE BLOOD CIRCULATION CO.,

Nerve-Force Hall,

ATLANTIC CITY, N. J.

Agriculture

Sub-Soil Plowing.

EDITOR KANSAS FARMER:—Though living in Indiana, I am a subscriber of the elegant KANSAS FARMER and am owner of a farm in Hodgeman County, Kansas. I feel interested in everything pertaining to farming in that semi-arid part of the State.

Please write me what you think would be the benefit to crops in that part, to have the land stirred to the depth of 5 to 20 inches by some means. I do not ask a long letter in reply, but simply your opinion.

Floyd County P. T. GREENE.

The depth to which a soil may be stirred to secure best results depends largely on the after treatment, the nature of the land, the crop to be grown, and the climatic conditions. Methods of tillage that leave the soil in such physical condition as to readily absorb the moisture as it falls, and to preserve it for the use of crops, are of great importance in regions of light rainfall and frequent drought. In the semi-arid district the average yield per acre depends very largely on the supply of soil moisture.

It would be very expensive to stir the ground each year to a depth of fifteen or twenty inches, and especially so if the intention would be to plow it. If the soil is thoroughly loosened, the after treatment would need to be properly done in order to firm or settle it again to prevent too free circulation of the air which stimulates evaporation, and to restore capillarity. If deep plowing is done, the seed-bed should be gradually deepened from year to year; otherwise by turning up the unweathered subsoil, the productiveness of the field will be reduced.

At this station, four plats, consisting of one-half acre each—two being plowed ten inches deep and two plowed only five inches deep—were planted to corn. One plat of each the deep and shallow plowing was irrigated, and one of each was not irrigated. The field had been in cultivation only two years and had been stirred to a depth of about five inches previous to the above plowing. The yields of corn were:

Treatment.	Irrigated Bu. per acre.	Not irrigated. per acre.
Plowed 10 in. deep, packed and harrowed	51.42	30.54
Plowed 5 in. deep, packed and harrowed	61.14	41.70

All plats received precisely the same treatment except for the depth of plowing and irrigation. It will be observed that the ten-inch plowing yielded about 10 bushels less per acre in each case. This shows that the seed-bed had best be gradually deepened from year to year, as the difference in the yield here is undoubtedly due to the fact that on the deeply plowed plats, the corn was planted in five inches of unweathered soil. No doubt, however, on account of the deep plowing being loose to a greater depth than the shallow plowing, the after treatment (sub-surface packing and harrowing) did not leave it in quite as good a physical condition as the shallow plowing.

Deep plowing, with proper after treatment, affords a better reservoir

for moisture and a better seed-bed for crops that root deeply. It is very desirable to develop and maintain a deep soil, though for ordinary farm crops, six to eight inches seems to be the most profitable depth; while for sugar beets and such crops, it pays to plow twelve inches, or even deeper.

The sub-soil plow, intended to be used in the bottom of an ordinary furrow, one plow following the other in doing the work, would be perhaps the most economical method to stir the soil to a depth of 15 or 20 inches, and even this requires considerable horse-power. The sub-soil plow, if properly used, certainly will increase the yield, on account of its tendency to increase the available moisture for crop production. Though whether or not it can be profitably used depends largely on given conditions and especially on the crop to be grown. The following figures show the effect of sub-soiling on the yield of corn, at the Fort Hays station:

Treatment.	Irrigated. Bu. per acre.	Not irrigated. per acre.
Subsoiled 16 inches deep	26.28	24.75
Not subsoiled	26	20.75

These plats received identically the same treatment except for the sub-soiling and the irrigation, and the variety of corn planted was the same for each plat. It will be observed that there is a little difference in yield on the irrigated plats, while the sub-soiling increased the yield about four bushels per acre on the non-irrigated plat. We shall continue these tests with corn, potatoes and sugar beets.

O. H. ELLING.

Corn Breeding in Wilson County.

EDITOR KANSAS FARMER:—Our farmers' institute has taken up the boys' corn-growing contest. I hope with the encouragement given by your paper and the local press, that many thousand boys will engage in it. That means many thousand bushels of improved seed-corn will be planted next spring by parents and neighbors of the boys. I do not know of anything that promises results both so immediate and so far-reaching as the contest. After securing uniform and productive types, increasing the proportion of grain and the protein-content will be in line. I have experimented enough to be satisfied that by selecting the lower ear from stalks producing two ears, one can soon have a two-eared corn as a rule, instead of an exception. Success to the KANSAS FARMER.

Wilson County. H. M. STARNES.

Bromus Inermis.

Will Bromus inermis grass make good hardy pasture for hogs? and how long will it take for it to become rooted so it will make a good pasture for hogs? When is the best time to put it in? Does it grow on all kinds of soil?

Crawford County. OLD SUBSCRIBER.

Bromus inermis will make a good pasture for hogs, as good as any domestic grass which may be grown in that section of the State. It is not advisable to pasture much the first season after sowing. If the grass makes a good start from spring seeding it may be pastured lightly in the fall. I would prefer to sow alfalfa with the grass, sowing only a small quantity of grass-seed, say 5 or 6 pounds per acre with 8 or 10 pounds of alfalfa-seed. Alfalfa is really a much more valuable forage plant than Bromus inermis and is especially valuable as a pasture for hogs. The Bromus inermis sown with the alfalfa will gradually thicken up and form a sod and make a more permanent pasture for hogs, perhaps, than will alfalfa alone. Clover may also be sown with Bromus inermis. It is al-

ways a time-tried, outwardly applied Home Remedy; an Electric-emulsion, imitating Nature's vital product of DIGESTION. It is founded upon the principle that Suffering, Premature Decline, and Premature Death—as suffered by nine-tenths of the World are born of

to you in a plain envelope and its possession entitles you to our free work upon your case in Diagnosis. You will be surprised over the fund of useful information our NERVE-FORCE Publication conveys, and the exactness of our work in Diagnosis.

CORWIN NERVE-FORCE BLOOD CIRCULATION CO.,

Nerve-Force Hall,

ATLANTIC CITY, N. J.

EXTREMELY LOW RATES

To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

ways advisable to sow some perennial legume such as clover or alfalfa with the perennial grasses. The legume is valuable for pasture and also acts as a feeder to the grass plants, making a more productive and permanent pasture than may be had from grass alone. Bromus inermis may be sown as early in the spring as a good seed-bed may be prepared, and if alfalfa is sown with the grass I would also seed early in the spring. Early fall seeding is also successful, sowing about the last of August or first of September. Bromus inermis will thrive on any good soil which will grow corn and grain crops.

A. M. TENNEY.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Provide necessary tools in advance of need.

The better selected the seed, the bigger the crop.

Rich meadows and pastures make rich plowed lands.

Study your soil and learn its capacity and needs.

Sow grasses for pastures that ripen at different periods.

The value of an orchard depends much on the selection of varieties.

With all crops a careful selection of seed will always pay.

The older the pig grows the more food will it take to make a pound of gain.

Many improvements can be made about the house when it is too cold or too stormy to work on the farm.

In nearly all cases, clover should be included in whatever system of rotation is adopted.

A proper rotation and wise tillage will do much to keep the soil supplied with available fertility.

We may not expect to breed any type of animal free from blemish, of which we do not have a fine type to begin with.

Consult your own likes and fancies in the choice of a breed, but do not let prejudice stand in the way of accepting the evidence of the markets.

All stock-feeding should be done with a view of saving the fertility which is in the food and getting it back upon the land.

Work that is not done on time requires double the labor to prepare afterward, and the results are never so good.

Better methods, better stock and tools have doubled the production of more than one farm and increased the profits.

It is only a good animal that will repay cost of production when prices are low, or give a profit from winter feeding at any time.

If the manure can not be hauled out as fast as needed, try at least to keep it under shelter until it can be hauled out.

The fertility of the land is more easily maintained by dairying than by following any other branch of farming.

Good breeding and good feeding are so closely related that they must go together. One is useless without the other.

In sowing clover or any of the

13 WEEKS FREE

Or 15 months for only \$1

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the west. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

KANSAS FARMER COMPANY, Topeka, Kansas.

I accept your trial offer to new subscribers to send me the Kansas Farmer three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O. Address.....

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

We Give Free Tickets to California

Write us To-Day for particulars and a copy of our Illustrated Magazine telling all about California, which will be sent you absolutely free. Address THE CALIFORNIAN, 440 S. Spring St., Los Angeles, Cal.

AGENTS WANTED Sell \$1 bottle Sarsaparilla for 25¢; best seller; 200 percent profit. Write today for terms. F. R. Greene, 115 Lake St., Chicago.

grasses, either for pasture or meadows, it pays to use plenty of seed so as to secure a good, even stand from the first.

Without stock there can be no complete utilization of the products of the farm. With stock there should be no waste products.

There is more profit in growing little things and in prime products in proportion, than there is in the great staples; but it requires a different sort of talent.

Profitable feeding consists in giving an animal all that it will eat and digest properly. Some large eaters do not digest their food well and are not fed with profit.

One advantage in growing such farm crops as fluctuate least in value is that it enables one to calculate with some degree of certainty on the outcome of the work.

It is not an economical plan to al-

National Collection Agency

Collections Made In All Parts of the Country

Send us your old notes and accounts for collection. We make a specialty of collecting bad debts and if you have anything due you send the account to us and let us collect it for you. It will save you lots of trouble and expense. You get the services of our attorney without additional cost. No fee unless collection is made. We cannot afford to keep this advertisement running all the time, but we want the readers of the Kansas Farmer to understand that we can collect their accounts and do it quickly. Bank references furnished. Let us hear from you at once. Address

National Collection Agency

Sharon Springs, Kansas

low animals to shift for themselves while making growth, with the idea that they may be fed up afterwards. Keep thrifty during growth and fatten by the time maturity is reached.

Remedies For Rats.

EDITOR KANSAS FARMER:—R. O., of Stafford County, wants a remedy for rats. They are like the plague; what is a sure cure for one may not help the "other fellow," so I send you some ways that have at different times helped me to get rid of them.

Set a water-tight barrel where they are in the habit of going, fill it nearly full of straw or hay and sprinkle on this grain, bran, or any feed that will attract them. Keep them well fed until they get in the habit of going there and jumping in about as pigs go into a trough, then empty the barrel and fill it with water about as nearly full as it was with straw; six or eight inches from the top is full enough. Sprinkle on some chaff, bran, oats, or anything that will float, with some kind of feed on top. If you have plenty of rats, you may fish out forty or fifty in the morning. You can not get all of them in this way, as they will not continue to go in until all are gone; but it will thin them rapidly for a few nights. You may get another catch by moving the barrel to another place and repeating the baiting.

Another way that once took every rat and cat off the place, was to mix plaster of Paris with an equal bulk of flour and put it where the rats could get it. The mixing needs to be very thorough. The moisture in the stomach sets the plaster and it goes no farther. Not knowing that cats would eat it, no care was taken to keep it from them, but they did eat it with fatal results. Dogs or pigs might also eat this with the same consequences; so keep it where it can not be found by stock of any kind.

A. MUNGER.

Riley County.

A Labor-Saving Device.

Notwithstanding the many forms of labor-saving machinery which have been invented for the farmer's use there are still enough arduous duties in connection with farmwork to warrant the farmer in welcoming anything which will still further lighten his labors.

In building fences, digging wells, erecting rural telephone lines and other similar operations, much of the hardest labor required is in digging holes for the posts. The best method for doing this work has been found to be a post auger. This implement does away with a great deal of the labor formerly required and also greatly facilitates the work as the holes can be dug much more rapidly.

The Iwan Post Hole and Well Auger, manufactured by the Iwan Bros., Streator, Ill., is a good example of this very useful article and its manufacturers say that it is the best auger in the world for boring into the earth. The two blades interlock, having notched edges for this purpose, thus holding them very firmly in place and also causing them to hold the dirt.

There is no suction when removing the auger from the hole. Little pressure is needed in operating it except when the ground is very hard and dry. It makes the hole smoothly and quickly and empties easily. It only takes three full turns of the auger to fill it with earth. It is very durable and can be used for boring in all kinds of ground with the exception of solid rock. It readily takes up gravel and small stones.

Any farmer, stockman, poultryman, nurseryman, telephone company, or in fact any one who finds it necessary to dig post-holes will find it greatly to his advantage to have this auger. It may

be obtained of any enterprising hardware or implement dealer or direct from the manufacturers. They are also engaged in making Sickle Edge Hay Knives, Tile Grain Cleaners, Tiling Spades, etc. For catalogue and further particulars address Iwan Bros., Streator, Ill. Kindly mention this paper.

Time to Plant Trees.

The best way to buy trees is to write to the Fairbury Nurseries, Fairbury, Neb., for their catalogue and select and order what you will need from it. Buy direct from the grower. In this way you not only save the agent's commission but there is nobody between you and the grower to make a mistake. If the trees are not what you order or don't grow, you put it right up to the grower to make good—and he'll do it because he wants you to have the best there is. The Fairbury Nurseries have a reputation that you can rely upon, and they like to sell direct; they want no agent between them and you because they want to know just how their stuff suits you and make it right if anything should be wrong. Their prices will please you and save you money. Write for the catalogue to-day and get your order in early.

Poison.

As far as shaving soap is concerned common soap ought to be marked poison. Shaving is a special process and demands a special soap. If your face has been poisoned with cheap soap, if it burns and smarts and itches, stop using the poison and use real shaving soap—Williams' Shaving Soap will cool and smooth your face and make shaving pleasant. The J. B. Williams Co., Glastonbury, Conn., offer in another column of this paper to send you a free trial sample. "For the sake of your face" read their ad.

Free to Farmers.

That farmers are becoming more and more interested in Andrae farm telephones is shown by the rapid decrease in the supply of books telling of these instruments of necessity. The book that the company distributes free describes all telephones, shows wherein a saving may be made by using the Andrae Phone and proves itself invaluable to all who intend installing one. A telephone is as valuable to the farm as a spring and when once installed would never be dispensed with. One of the books can be had by addressing a postal to Julius Andrae & Sons Co., 823 W. Water St., Milwaukee, Wis.

The March issue of The Fruit-Grower, published at St. Joseph, Mo., is an exceedingly handsome number. It consists of 64 pages, with handsome cover design, in two colors, and is the regular gardening annual of this publication. Prize-gardening articles are submitted from various parts of the country, which cover the subject of the management of the home garden in a very effective manner. These articles are well illustrated. Another feature is an illustrated article on the subject of spraying fruit-trees, with suggestions for making and applying the spray mixtures needed in the spring. The illustrations show a number of spraying outfits, with mixing tanks, elevated platforms, etc. The paper is a credit to its publishers, and is full of live, fresh matter of value to every one interested in growing fruit or who desires to make the home garden more of a success.

Syracuse, N. Y., Dec. 30, 1905.

Gentlemen:—Please forward to my address a copy of "A Treatise on the Horse" at your earliest convenience. We have used considerable of your Spavin Cure and consider it one of the best, if not the best liniment on the market. Thanking you in advance for the book, we remain, Very truly yours,

H. C. FOXTON.

A California trip is made doubly pleasant if it includes a daylight ride over the Rockies. This is the way of the Colorado Midland. Colonists' rates in effect daily February 15th to April 7th. For full information write Morell Law, travelling passenger agent, 566 Shiedly bldg., Kansas City, Mo., or C. H. Speers G. P. A., Denver, Colo.

SPECIAL

Homesearchers' Rates

VIA

Rock Island

March 6th and 20th

ROUND TRIP TICKETS at 75 per cent of the one way rate, with minimum \$10.00.

ONE WAY TICKETS at 50 per cent of the one way rate plus \$2.00, with minimum \$6.00.

To points in Arkansas, Oklahoma, Indian Territory, Louisiana, New Mexico and Texas. . . .

For full information see Rock Island Agents.



A. M. FULLER, C. P. A.

TOPEKA, KANS.

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a résumé of the experience of American farmers with grass, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; bromo grasses; grasses for special conditions; buying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation it was used as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

Illustrated, 5x7 inches, 248 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA.

KANSAS

EARLY SPRING BROILERS.
Hatched Almost Exclusively by Incubator.

Prices for early spring broilers are usually highest during March and April, and it is in the fancy prices obtained for this class of poultry that the greatest poultry profit lies. Owing to the remarkable ease by which poultrymen can regulate the reason of hatching by means of the incubator, it is not to be wondered at that ninety-five out of every one hundred broilers are incubator hatched.

Of course, the better the incubator the better the result and the greater the profit. Leading poultrymen are profuse in their praise of the Wooden Hen, a 200-egg size incubator, made by George H. Stahl, of Quincy, Ill., and which sells for the remarkably low price of \$12.80. The Wooden Hen is perhaps the best known of all incubators, and is easily the leader where results are considered. It is scientifically constructed—every problem of heat and ventilation has been solved, and it is claimed that the Wooden Hen will hatch every fertile egg. Five minutes time daily is all the attention required—easily operated by any one.

Those interested in poultry-raising, either for pleasure or profit, will get a lot of valuable information from the new catalogue issued by the maker of the Wooden Hen—it's free to all. Better write now before you forget it—just address George H. Stahl, Quincy, Ill.

THE MARKETS.

Kansas City Live Stock Market.
Stock Yards, Kansas City, Mo.

Monday, March 5, 1906.

The promising start in the cattle market last week turned out to be misleading. Higher prices Monday and Tuesday brought out liberal supplies of beef steers after Tuesday. Buyers used the argument they always employ at the beginning of Lent, besides having plenty to select from, and prices declined 15@25¢ from the high time, taking off the gain of first two days of the week. The market was erratic, and fluctuations violent. Good cows held the advance of the first of the week, medium cows and heifers did not make any net gain for the week, veal calves lost 25@50¢, but stockers and feeders were scarce and in good demand, closing the week 10@25¢ higher.

The cattle supply is only 6,000 today, lightest Monday this year, by a third, and prices 10@15¢ higher, or a little better than last Monday on all classes. Top steers sold last week at \$5.75, bulk to-day at \$4.75@5.15, as there are no good steers here to-day, best heifers \$4@4.75, cows \$3@4.25, bulls \$3@3.75, veal calves \$5@6.75. Veals are 75¢@\$1 lower than the high time. Feeders bring up to \$4.80, stockers \$4.60, bulk of feeds above \$4, stockers \$3.50@4.25, a certain percentage at \$3@3.50. Supply from the far West and the Panhandle country was smallest last week of the winter.

Bad country roads are said to have held down hog receipts last week, and to be responsible for the small supply of 5,000 head to-day. The market is most changeable, buyers operating slowly, and sellers in the dark most of the time. The week showed us a net loss of 5¢, but to-day's market is 10@15¢ higher, top \$6.35, bulk of sales \$6.22½@4.60. Supply last week 51,000, a decrease of 11,000 from previous week. Sheep and lamb receipts last week 34,000, a decrease of 8,000 from previous week, and prices on sheep gained 5@10¢. Lambs held steady. Cheap eggs and the beginning of Lent were arguments used to prevent any material advance. Supply to-day is 10,000, but contains a large percentage of ewes and wethers, which the packers most want. Market is 10@15¢ higher on both sheep and lambs. Lambs sold at \$6.35@6.80 to-day, yearlings bring up to \$6, for light weights, wethers \$5.60@5.90, ewes \$4.75@5.40. J. A. RICKART.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., Mar. 5, 1906.

There was a little stronger feeling in the market on dressed beef and export steers to-day, and the receipts at the five points were about 10,000 less than the number in sight for the corresponding days last week. About all that were offered here were a few lots of decent medium grades that sold at \$4.90@5.15, and a few loads of light and medium under-fed and half-fat steers that sold at \$4.35@4.60, while occasionally sales were no more than steady with the close of last week. The general tone of the market was stronger, and spots showed an advance of 5@10¢. The supply of cows and heifers was also very light and prices generally were strong to 10¢ higher than the close of last week. Bulls and veals were steady. Good to choice stock and feeding steers were in fair demand and steady, while fair qualities were dull and weak.

Following are current quotations: Native steers \$4@5.90; Texas and Westerns \$3.65@4.50; cows and heifers \$1.65@4.60; bulls and stags \$1.90@4.65; veals \$3@6.75; yearlings and calves \$2.50@3.75; stockers and feeders \$3@4.50.

The supply of hogs at the five points to-day was 35,000 less than a week ago, and prices went sky-rocketing and reached the highest point in three years. Prices to-day ranged from \$6.10@6.35, bulk selling at \$6.25@6.30. The severe storms of last week and the bad condition of country roads was responsible for the small number of hogs in sight to-day, and it is quite evident that receipts will run light the remainder of the week. In this event values will probably work higher. But the country should not get excited and should not follow the advances too closely.

Receipts of sheep were pretty large but conditions were favorable to the selling interests and the market ruled active and 10@15¢ higher, and advance being particularly on lambs, best selling up to \$6.85. WARRICK.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

MILK COWS FOR SALE—By V. B. Howey, Route 1, Topeka, Kansas.

FOR SALE—A herd of registered Red Polled cattle at a bargain. I. Sandusky, Route 9, Wichita, Kan.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th, also car bigh yearling bulls. Duff & Sons, Horton, Kansas.

RED SHORTHORN BULL FOR SALE. A. C. Rail, R. R. 4, Junction City, Kans.

FIVE REGISTERED HEREFORD BULLS for sale. All good individuals. Eight months, 9 months, 1 year, 20 months, and 4 years are their respective ages. Cooper Monroe, Lyons, Kans., R. F. D. 5.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans., R. R. 2.

FOR SALE—The great show and breeding bull, 198 Duke of Wildwood 148143, that took 4th place at the Kansas City Royal in 1904; also 20 cows and heifers all choice individuals, some show stuff. Geo. Manville, Fawcette, Mo.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address, C. A. Kline, R. F. D. 1, Tecumseh, Kans.

FOR SALE—Hereford bulls, choice and blacky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

HOLSTEINS—Bull calves, 3 to 8 months old, one yearling, extra choice. H. B. Cowles, Topeka, Kans.

PEDIGREAED SHORTHORN BULL—3 years old; sire Magenta, who cost \$1,100 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemeray, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Viollet Prince No. 145647. Has been at the head of our herd as long as we can use him. An extra animal. H. W. McAfee, Topeka, Kans. (2 miles west of Kansas Ave. on 6th Street road).

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 Ranch, Bixby, O. T.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Blvd., Kansas City, Mo.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires. A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); grandam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for 2 years. Her 4 dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kans.

SWINE.

FOR SALE—25 Duroc-Jersey boars, large enough for service and 60 gilts, open or bred. Pigs strong boned and best of color. Prices vary. A. G. Dorr, Route 5, Osage City, Kans.

FOR SALE—20 good, strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

SHEEP.

I HAVE for sale about 1150 sheep, 800 ewes, 300 mixed yearlings and 30 rams; large, smooth merinos; good shearers, at \$1.00 per head; come and see them, they are worth the money. E. H. Boyer, Meade Co., Meade, Kans.

HELP WANTED.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

WANTED—Single man on farm, must be congenial with stock. F. M. Linscott, Farmington, Kans.

HORSES AND MULES.

FOR SALE—Black Mammoth Jack, 3 years old past, 14½ hands high; perfect and first-class in every respect and guaranteed; \$600 if sold before April 1st. A. E. Cooper, Halstead, Kans.

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,300 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE—at reasonable prices, Black Impaled Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY JACK Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

POULTRY.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners, 15 for \$2; from flock, 100 for \$5. W. C. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

CHICK-O for baby chicks; a complete, balanced ration. Ask your dealer or write, D. O. Coe, Topeka.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st at cok. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75¢; 100 for \$5. H. F. Brueggemann, Route 2, Herington, Kans.

PURE BRED White Wyandotte eggs for sale; \$10 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94½ points. Write for prices. A. F. Hutton, Maple Hill, Kansas.

FINE BLACK LANGSHANS started from \$3.00 eggs. Thirty eggs for 50 cents. Minnie D. Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—from main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

SEEDS AND PLANTS.

PEDIRED SEED-CORN—Raised from Funk Bros.' high-bred Boone county ("Special") White. The seed from which this corn is grown cost me \$5 per bu. It is now acclimated to Kansas. Select ears for sale at \$2 per bu. Address Edwin Taylor, Edwardsville, Kans.

SIXTY-DAY OATS—Recleaned, \$2.00 per bushel sacked. C. E. Cheney, Manchester, Kans.

FOR GOOD SEED—Speltz, recleaned and fanned by hand. Write Adams & Walton, Osage City, Kan.

FOR SALE—Speltz, 50 cents; macaroni wheat per bushel, f. o. b., sacked. One Sure Hatch incubator and brooder, all in good shape, 150 egg size, \$6.00. J. B. Keeley, Sterling, Kans.

FOR RENT—FRUIT, BERRY, POTATO, LAND near growing Coffeyville, 15,000 population. Local market. Land, plants, trees, seed furnished competent, industrious, reasonable party that will make up-to-date fruit farm; crop basis; 80 acres, healthy location, house poor. Allin Grain Co., Coffeyville, Kans.

FOR ONE DOLLAR—I will send you 300 strawberry plants, 5 best kinds or 100 raspberry plants, 3 best kinds, or 100 blackberry or 200 asparagus or 25 grapes or currants or gooseberries; also have roses, carnations and other flowering plants. Send for catalogue. A. J. Nicholson, Manhattan, Kans.

PURE KHRSOON SEED OATS—cleaned and sacked, 50 cents per bushel, f. o. b. Hull. Thos. Williams, Hull, Kansas.

FOR SALE—Kherson Seed Oats, recleaned, finest quality, 75¢ per bu.; 10 bu., lots, 60 cents. Sacked, f. o. b. Achenbach Bros., Washington, Kansas.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SMALL FRUIT PLANTS—for price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Sons, Route 9, Lawrence, Kans.

FRUIT TREES half price, best quality. Catalogue free. Baldwin, Seneca, Kans.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35¢; 1,000, \$2.25. Raspberry, 100, 70¢; 1,000, \$6. Blackberries, 100, 70¢; 1,000, \$5. Grapes, 2 year, 5¢. Currants and gooseberries, per 10, 50¢. Asparagus, 100, 40¢; 1,000, \$2.25. Rhubarb, 10, 30¢; 100, 75¢. Dahlia, 10, 30¢; 100, 75¢. Gladiolus bulbs per 10, 100; 100, 75¢. Dahlias, each, 10¢; 100, \$5. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Springs Nurseries, Bonner Springs, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes, six kinds. Prices on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety."—Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State corn-breeders' contest 1906, won 1st and 2d prize for the most productive acre—103 and 78½ bushels. Write to C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

MISCELLANEOUS.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

STRAYED OR STOLEN from my farm, 2 hay horses, weight about 14 or 15 hundred pounds, one with blaze face, glass eyes, feet white; other, one hind foot white, patch of hair off of right jaw. Suitable reward for return. Allen Flesch, Route 1, Garfield, Pawnee County, Kans.

MISCELLANEOUS.

GOOD DAIRY BUSINESS and route for sale or trade (only route in county seat); business amounts to five thousand yearly. Address D. S. Burnham, Minneapolis, Kans.

WANTED—At once, sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 to as high as \$165.50 per month. Wanted 400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago, Ill.

Stray List

Week Ending February 15.

Montgomery County—Samuel McMurtry, Clerk. PONY—Taken up by J. F. Shipley, in Parker, Tp., December, 1905, one sorrel pony mare, about 6 years old, white stripe in forehead; valued at \$30.

Week Ending February 22.

Chautauqua County—L. G. Wells, Clerk. COLT—Taken up by D. D. Scott, Peru, Kans., November 23, 1905, one dark mare colt, 2 years old, branded L on left shoulder; valued at \$15.

J. L. MILLER & SON, Muscotah, Kansas. Breeders of Shorthorn Cattle. Six coming yearling bulls for sale at reasonable prices. These animals are Rose of Sharon foundation and are fine individuals and sired by The Champion of Deleary Valley 154559, a son of Gentleman 126072, he by Red Knight bred by W. A. Harris.

ROSE COMB BROWN LEGHOR

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

Write us for description on June, July and August pigs. Prices \$8 to \$10 each. Eight choice herd sows, guaranteed. Prices right if taken at once.

NEWTON BROS. Whiting, Kans. Breeders of Registered Duroc-Jerseys.

COUNTY SEAT HERD DUROC-JERSEY SWINE Geo. Briggs & Son, Clay Center, Neb. Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.

E. S. COWEE. R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE, Wichita, Kansas. Farm two miles west of city on Maple Avenue.

Orchard Hill Herd of Duroc-Jerseys.

Please write for private sale catalogue of young boars and bred gilts and sows. **R. F. NORTON & SON**, Clay Center, Kans.

Fairview Herds, Duroc and Red Polled

A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER, Frankfort, Kansas.

Highland Herd of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

CRIMSON HERD OF DUROCS

Our herd is headed by first Price Boar Crimson Wonder, 38755, Jr., by Crimson Wonder, 26355, the great Boar Winner of many firsts, assisted by Kerr's Champion, 34469, this fine boar is now for sale, also some fine young boar gilts for sale, also some August and September pigs. Mr. and Mrs. Henry Shrader, Wauneta, Kans.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, Wichita, Kans.

Egypt Valley Durocs

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kans.

POLAND-CHINAS.

A. AND P. SCHMITZ, ALMA, KANSAS. Breeders of Poland China Hogs.

We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description.

DIRIGO BREEDING FARM.

Poland-Chinas for sale of the most fashionable strains. Herd boar R's Grand Chief by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale. **J. R. Roberts**, Deer Creek, Okla.

Main's Herd of Poland-Chinas

A grand lot of spring and fall pigs, sired by the great show hog, Empire Chief 303765 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 230 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan

GUS AARON'S POLAND-CHINAS

Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27984, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

C. P. BROWN, R. 2, Whiting, Kans.

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-Chinn Hogs, Holstein-Friesian Cattle; either sex. Best strains represented.

H. N. HOLDEMAN, R. R. No. 2, Girard, Kans

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter, and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Oak Grove Stock Farm

POLAND-CHINAS

Best strains, good individuals. Choice fall pigs, both sexes, for sale at reasonable prices.

E. E. AXLINE Oak Grove

30 miles East of Kansas City on the C. & A. "The Only Way."

Long Distance Phone at farm, Jackson Co., Mo.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Paulina, Improve 3d, and Chief Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard, Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREAED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37182, Slick Perfection 32804, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

200 HEAD POLAND - CHINAS

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royalty bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, 1-2 Mile Sedgwick, Kansas

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kans.

CHESTER WHITES.

O. I. C. SWINE

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair CHESTER-WHITE HOGS

Shortorn cattle, Oxford sheep and Peafowls, won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in lots.

W. W. WALTMIRE, Peoullar, Mo.

O. I. C. Hogs
Scotch Collie Dogs
B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,

H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulma, Silver Mine and others. Head-quarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

BERKSHIRES.

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willem, Iuman, Kans.

CEDAR LAWN BERKSHIRES My sows are Prime 6477s, and Berryton Duke 72946. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72668. Boars April and May farrow; good ones at reasonable price.

Order quick and get first choices.

MANWARING BROS., Route 1, Lawrence, Kans.

Route 1, Lawrence, Kans.

SUTTON'S BERKSHIRES Imported Blood

30 extra choice Boars, 100 to 150 pounds. 40 extra choice Gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kansas

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Ducks 56891, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Hallie 60125, sweepstakes Pan-American sow; Stump Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Modis Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 9th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 8 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address **PARRISH & MILLER**, Hudson, Route 1, Stafford Co., Kans.

Address <

SHORTHORNS.

ALFALFA LEAF STOCK FARM
JOHN REIGER, Prop., Whitewater, Kans.
Breeder of thick-skinned, early-maturing Shorthorn cattle.
NONPAREIL STAR 18848 at head of herd.

**ALYSDALE HERD
SHORTHORNS**

Headed by the great Cruckshank bull, Prince Conqueror 187008, sired by Imported Prince of Perth 153879, and out of own sister of Lavender Viscount 124755. Fine Young Bulls—13 to 16 months old, for sale, at very reasonable prices. Sired by such bulls as Lord Mayor, Mayor; Valentine, and Proud Knight.

C. W. MERRIAM,
Columbian Building, Topeka, Kansas

Pearl Shorthorn Herd

40 Young Bulls for Sale, ranging from 6 to 14 months old and sired by the noted Scotch bulls, Baron Ury 2d 124970, Sunflower's Boy 127837, and Bold Knight 179054. Address

C. W. TAYLOR,
(Wire or Phone), Pearl, Dickinson Co.
(Mail Box No. 2), Enterprise, Kans.

SHORTHORNS

Public Sale, April 10, 1906

...40 HEAD...

A. M. Ashcraft, Atchison, Kansas.

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

**New York Valley Herds
of Shorthorns and Berkshires**

Baron Rupert 24827 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1, Yates Center, Kans.

HOLSTEINS.

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young Bulls and a few young cows and
heifers for sale.

**DO YOU WANT
GOOD READING**

The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$2.00
The Cosmopolitan.....	1.00
Woman's Home Companion.....	1.00
Kansas Farmer.....	1.00
Total	\$6.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$2 received at this office. The four must go in one set, though they can be sent to different addresses. Address

**KANSAS FARMER CO.,
TOPEKA, KANSAS.**

FIFTH TERM
**JONES' NATIONAL SCHOOL
of
Auctioneering and Oratory**
Davenport, Iowa
5th term opens July 23, 1906. All branches of the work taught. Students now selling in 12 states. For catalogues write Carey M. Jones, President.

When writing advertisers please mention Kansas Farmer.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large, black, with light points, prices right. Write me what you want. Address,

WALTER WARREN, Veterinarian,
Windsor, Mo.

REGISTERED BLACK MAMMOTH
and CATALANIAN JACKS, SADDLE
and TROTTING HORSES

The best in the state and at a low price. Come or write for prices on what you want.
G. A. FEWEL
LETON, JOHNSON CO., MO.

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sexes. Also Shorthorn cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. THISLER, Chapman, Kas.

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700 pounds, 4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kans.

**Percheron Stallions
FOR SALE**

Three Percheron stallions:

Col. Carter 27952, grey and weighs 2,000 pounds, by Titus 17122 (36778).

Cricket 28007 by Titus 17122 (36778).

The other a black stallion of same breeding as Cricket.

Look up these horses and you will find their breeding of the best. Write me for full description.

Wyatt Stanley
ANTHONY, KANSAS

**You Will Prosper
in the Great
Southwest**

In Oklahoma, Indian Territory and Texas are vast areas of unimproved land—land not now yielding the crops of which it is capable. The same conditions apply to the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and factories, for small stores, for banks, newspapers and lumber yards. You have only to get on the ground to prove this. To enable you to do so the Missouri, Kansas & Texas Ry offers

**Rates Cheaper Than Ever
February 20th and
March 6th and 20th**

On above dates most lines will sell both one-way and round-trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

If you're in any way interested in the Southwest, I'd like to send you my paper "The Coming Country." Address

W. S. ST. GEORGE
General Passenger Agent
580 Wainwright Building, St. Louis, Mo.
Tickets on sale everywhere, via



"SOUTHWEST."

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address,

KANSAS FARMER CO.,
Topeka, Kans.

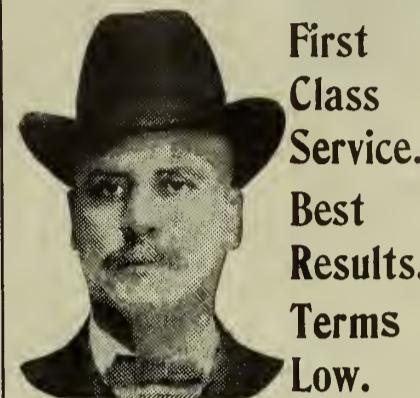
LIVE-STOCK AUCTIONEERS.**LIVE-STOCK AUCTIONEERS.****JOHN D. SNYDER,**

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN**AUCTIONEER**

Bunceton, Mo.



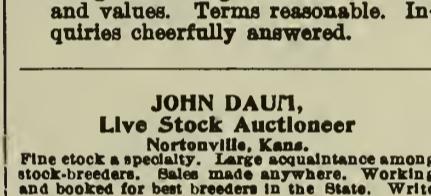
First
Class
Service.
Best
Results.
Terms
Low.

Z. S. BRANSON,
Live Stock Auctioneer
Lincoln, Neb.

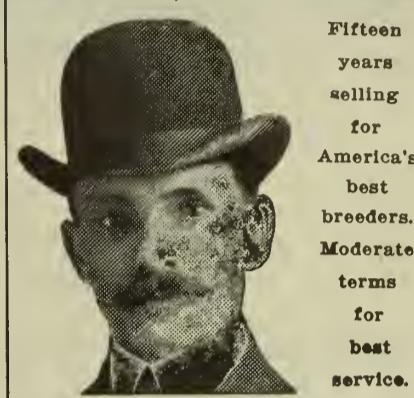
Thorough knowledge of breeds, bloods and values. Terms reasonable. Inquiries cheerfully answered.

JOHN DAUM,
Live Stock Auctioneer

Nortonville, Kans.
Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

**JAS. W. SPARKS****Live Stock Auctioneer**

MARSHALL, MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER,
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling only when employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty.
All Herd Books. Catalogues compiled. Sale tent free.

Very Low Rates**West and
Northwest**

February 15 to April 7.

FROM KANSAS CITY:

\$25⁰⁰ to Portland, Taeoma, Seattle, Victoria, Vancouver and many other points in the Pacific Northwest.

\$25⁰⁰ to San Francisco, Los Angeles, San Diego and hundreds of points in California.

\$22⁵⁰ to Spokane and points in the "Inland Empire" of Eastern Washington.

\$20⁰⁰ to Salt Lake City, Ogden, Butte, Helena, Anaconda, Missoula and other points in Utah and Montana.

\$15⁰⁰ to Billings, Mont., metropolis of a prosperous farming and stock-raising region.

These are one-way second-class tickets, good in chair cars, thru' tourist sleepers and coaches. Rates proportionately low from other points.

For particulars write me today—a postal will do.

E. A. ABBOTT, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

1906

**Burlington
Route****LIGHTNING PORTABLE**

WAGON
and STOCK
SCALE

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri.

FRANK IAMS



lions than any man in the United States. He has his "man with cash or bankable note gets away from Iams. Iams' daily "horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

120—STALLIONS—120

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent ton stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick" stallion salesmen's word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM
Breeder and Importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS,
Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yalti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.
S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

..... by
H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA UNIVERSITY.

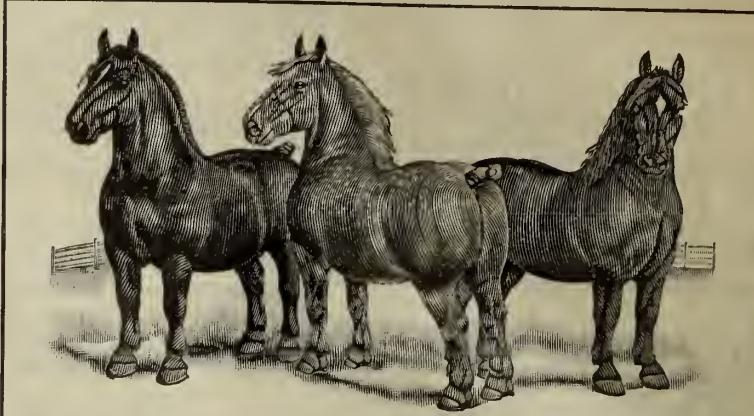
How to feed for beef, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer

13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists, Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor, Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	PEARSON'S MAGAZINE	NATIONAL MAGAZINE	AMERICAN BOY OR.....	PHYSICAL CULTURE MAGAZINE.....
----------------------------	--------------------------	-------------------------	----------------------	--------------------------------

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KAN.

**FOURTH ANNUAL SALE OF
REGISTERED HEREFORDS,
BY THE
MARSHALL COUNTY HEREFORD ASSOCIATION
WILL BE HELD AT
Blue Rapids, Kansas**

THURSDAY, APRIL 5th, 1906.

32 HEAD OF BULLS

13 COWS and HEIFERS

45 head of registered Herefords, contributed by the following breeders: Miss Lou Goodwin, Miss Florence Preston, A. Borck, Brown Bros., E. R. Morgan, Cottrell Bros., F. W. Preston, L. P. Larson, Geo. E. Miller, McKee Bros., and W. A. Gilson.

These bulls are good enough to head anybody's herd. All who have attended the annual sales of the Marshall County Hereford Association know the high quality of the stuff sold there.

For Catalogue address

**F. W. PRESTON, Secy.,
BLUE RAPIDS, KAN.**

Auctioneers—Cols. R. E. Edmonson and Others.

C. S. Nevius' First Annual Sale

Shorthorn Cattle and Poland-China Bred Sows

March 13, 1906, at his farm at Chiles, Kansas

Forty-five bred sows; 15 aged sows and fall yearlings bred to Designer 39199; 25 Chlef Ideal 2d gilts bred to Designer and Royal Model. Hog sale at 10 o'clock sharp. Forty-five Shorthorns, our entire 1905 show herd. Twelve of our best brood cows, balance yearling and 2-year-old helpers. Twelve good bulls, at least four are show bulls.

**C. S. NEVIUS
Chiles, Miami County, Kansas**

Dispersion Sale of Galloways



Having decided to retire from active business, I will sell at public auction at

Hope, Kans., March 6, 1906,

all my Galloway cattle consisting of 23 head of females aged from 10 months to 8 years old, and 10 bulls, registered Galloways from 10 to 30 months old. This is a herd of well-bred registered Galloways, among which are Senora R. 18200, 3d prize 2-year-old Iowa State Fair 1902, in class of 12; and first at Nebraska State Fair 1902. She is the mother of several in this sale. Pearl of Maples 11522, mother of several show animals, also several in this sale, Ephemie of Waverly 11904, dam of Ethel, champion female of Winnipeg 1901, mother of several. Sallie W. 18947 from imported cow and others. Will also sell 15 mules 3 and 4 years old. About 40 high-grade Galloway cattle and milk cows and a lot of other stock.

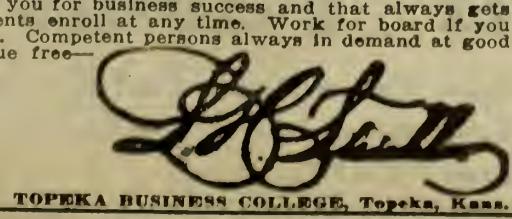
Sale to begin at 10 o'clock. Cols. J. R. Burton and H. R. Little, Auctioneers. Address

Thos. Gribben, Hope, Kans.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship



TOPEKA BUSINESS COLLEGE, Topeka, Kans.

GREAT COMBINATION SALE!

**60 Thoroughbred Hereford, Shorthorn and Angus Cattle;
Duroc-Jersey, Poland-China and Berkshire Hogs**

ELK CITY, KAN., SATURDAY, MARCH 17, 1906

BREEDERS REPRESENTED

Hereford Cattle.—Raman Yohe, Elk City; I. L. Swinny, Lafontaine; Samuel Drybread, Elk City.
Shorthorn Cattle.—H. M. Hill, Lafontaine; R. J. Conway, Elk City; B. H. Jeter, Elk City; D. O. Cripps, Elk City; Dunham & Logan, Lafontaine.

Angus Cattle.—G. G. Coleman, Elk City.

Duroc-Jersey Hogs.—W. O. Stephenson, Elk City; G. H. Coleman, Independence; Samuel Drybread, Elk City.

Poland-China Hogs.—J. A. McDowell, Elk City; I. L. Swinny, Lafontaine; R. J. Conway, Elk City.

Berkshire Hogs.—H. H. Miller & Son, Elk City; D. O. Cripps, Elk City.

TERMS OF SALE.—Cash or bankable note for six months, drawing 10 per cent interest. No postponement on account of weather. Sale held under cover, rain or shine.

For Catalogue apply to **SAMUEL DRYBREAD, Manager, Elk City, Kans.**

DIAMOND CREEK STOCK FARM

Public Sale of

50 Head Standard Bred Horses

AT THE FARM ADJOINING

HERINGTON, KANS., MONDAY, MARCH 26, 1906

CONSISTING OF

**Brood Mares, Young Stallions,
Geldings and Fillies** Ranging from 1 to 3 years old...

Including some of the best stock ever sold in the State. Our leading stallion is Escobar, 2:13 3-4

SALE UNDER COVER. STOCK SHOWN AT ANY TIME PREVIOUS TO SALE

For Catalogue address . . . **J. W. CREECH, Proprietor,
HERINGTON, KANSAS**

Public Sale

Scotch and Scotch-Topped Shorthorn Cattle

at Live-Stock Pavilion,

Kansas City, Missouri, Monday, March 12, 1906

Fourteen bulls and 24 females. The bulls are all large, strong, growthy individuals, dark red in color, ranging in ages from 2 to 4 years. The two herd bulls included in this sale are straight Scotch Brawith bulls and most of the cows will have calves at foot or be bred to them. The females are Scotch and Scotch-topped Young Marys, Brawith Buds, Moss Roses, etc., and are a useful lot. Send for catalogue at once.

G. W. Wood, Winston, Missouri

Cols. Bellows and Graham, Auctioneers.

St. Joseph Stock Yards Co.

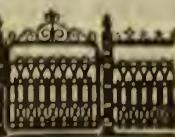
South St. Joseph, Missouri

A Short Story to the Point—Ship Your Live Stock to St. Joseph and return home well pleased.

Jno. Donavan L. D. W. VanVleet M. B. Irwin

Vice-President and General Manager Assistant General Manager

Traffic Manager



YARD FENCE HANDSOME, STRONG AND DURABLE. Almost as cheap as wood and lasts ten times longer. Sold direct to consumers on thirty days trial. Write for catalogue.

The Farmers' Fence Co. MELVERN, KANSAS

Box 36.

CALIFORNIA

The Land of Promise and Fulfilment

THIS IS A BEAUTIFUL DATE PALM DRIVE LOCATED FIVE MILES FROM THE FRESNO IRRIGATED FARMS. ONLY PLANTED THIRTEEN YEARS AGO.



WHY NOT LIVE IN A COUNTRY WHERE YOU COULD HAVE A BEAUTIFUL AVENUE LEADING TO YOUR HOME LIKE THIS ONE PICTURED HERE? THIS PHOTOGRAPH TAKEN IN NOVEMBER.

The A B C of Farming in California

Question: What is irrigation? Answer: Irrigation is raising crops by flow of water, taken from wells or streams and run over the land by gravity.

Question: Is it hard to irrigate? Answer: No, it is not hard to irrigate. It can be learned in a day. It is a pleasure to see the water running over the land and it is not costly.

Question: What does irrigation pay when compared to raising crops by rainfall? Answer: Crops raised by irrigation pay from three to ten times more per acre in a year than by rainfall. This is the reason irrigated land raises in price so much faster than land that depends upon rainfall.

Question: Why do crops pay so much better by irrigation than by rainfall? Answer: Because there is no drouth to make the crop wither; because there is no loss of crop from too much wet weather; because in a dry atmosphere like that of Fresno County, there are no blight or rust, rot or mildew to injure the crop; because moisture on the root and dry air in the stalk with constant sunshine are the agents that make the crops of the largest yield the best quality.

Question: What other advantages are there in irrigation? Answer: By irrigation you are able to regulate the moisture to just the exact amount that suits the best perfection in your crop. That can not be done by rainfall. Sometimes it may be too wet or too dry. Then again, there is no loss of time from the harvest and no fear of having a crop injured by storms or rain at harvest.

Question: Does irrigated land bring a higher price per acre than land dependent upon rainfall? Answer: Yes, irrigated lands become from five to ten times higher in price than land dependent upon rainfall.

Question: Why? Answer: Because each acre is certain of a good crop each year.

Question: Can you make a living on twenty acres of Fresno Irrigated Farms Co.'s land in California? Answer: Yes. You can make a better living on twenty acres and lay up more money than you could on eighty acres in the East. People are doing it here now. That's another advantage of farming by irrigation. It makes close neighbors, produces good schools and where neighbors are near together and making money they wish to buy additional lands adjoining and that makes the prices raise.

Question: What kind of crops can you raise on the Fresno Irrigated Farms Co.'s lands? Answer: A wonderful variety. Wheat and oats in winter. Almost all kinds of fruits, oranges, lemons, figs, peaches, table grapes, wine grapes, pomelos, almonds, apricots, corn, potatoes, vegetables of all kinds and that king of fodder plants, alfalfa.

Question: What is alfalfa? Answer: Alfalfa is the most valuable forage plant we have. It is a kind of clover. It grows all the year around. You can get five cuttings a year and have from one to two tons per acre each cutting with pasture lands besides.

These questions and answers to be continued in our next advertisement of next week. If you want more information about California, write to us at once for our booklet Fresno Irrigated Farms Co., containing sixty-four pages filled with pictures, mailed free.

CAMP LIFE UNDER THE UMBRELLA GROVE IN A LARGE ORCHARD AND RAISIN VINEYARD ON THE FRESNO IRRIGATED FARMS CO.



WOULD YOU NOT ENJOY CAMPING OUT TWO OR THREE MONTHS WORKING IN YOUR NEIGHBOR'S ORCHARD OR VINEYARD? THIS WOULD HELP YOU TO GET A START.

Fresno Irrigated Farms Co.,

Main Office—511 Kohl Bldg., San Francisco, California
230 Pacific Electric Bldg., Los Angeles, California
1161 I Street, Fresno, California

630.5
KAF

KANSAS FARMER

Volume XLIV. Number 11

TOPEKA, KANSAS, MARCH 15, 1906

Established 1863. \$1 a Year

RAILROAD CATTLE-GUARDS AND FENCES.

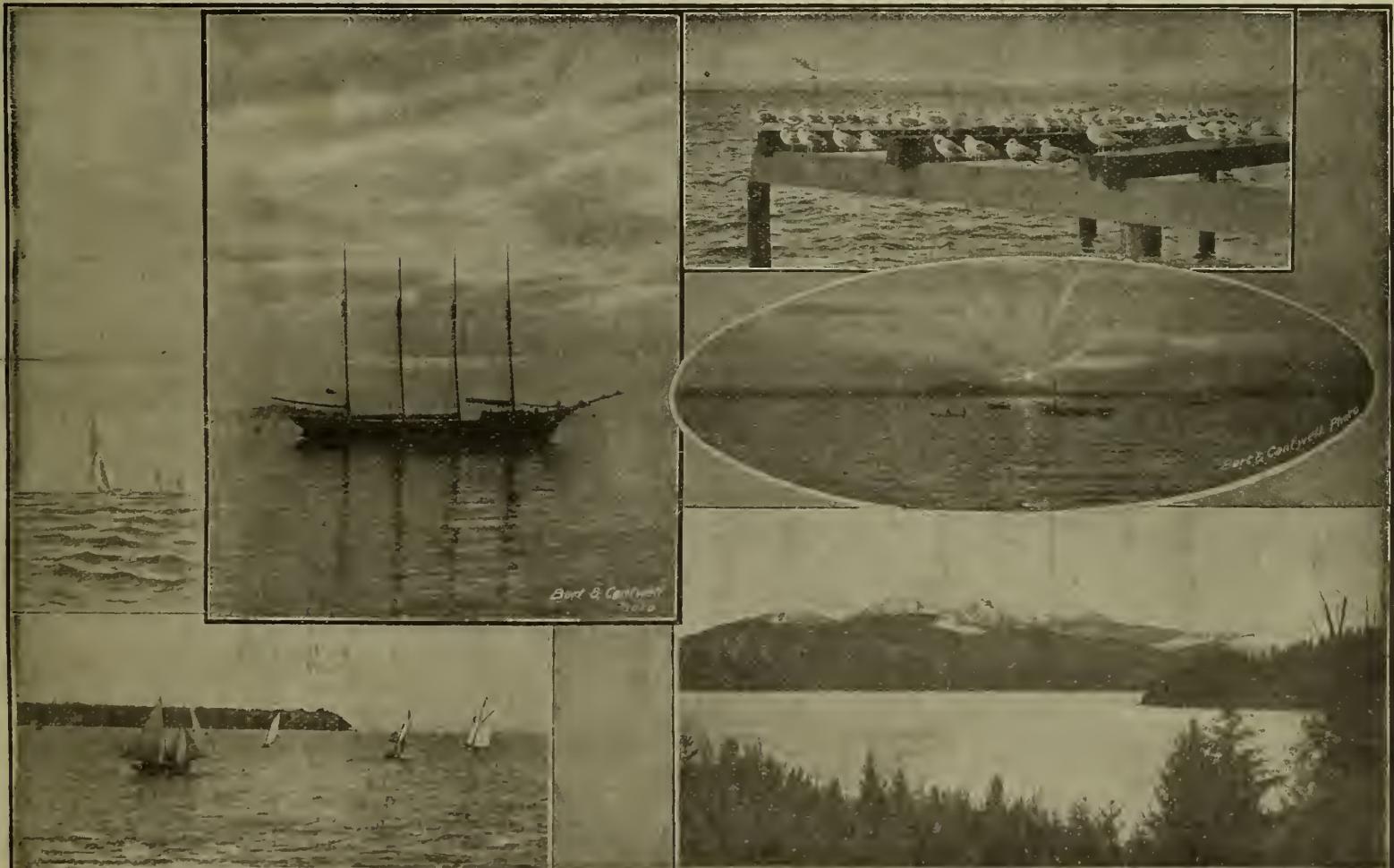
EDITOR KANSAS FARMER:—I would like to have some information in regard to fencing the railroad. The Missouri Pacific railroad runs through my farm and I requested the superintendent to put in cattle-guards at the cross-

for all damages arising from neglect or refusal to comply with section 18.

Section 28 of Chapter 70 reads as follows: "Any person owning land by or through which any railroad has been or may be constructed, who has or may inclose the same or any part thereof, and adjacent to the line of such rail-

forward it to the proper higher official of the Missouri Pacific railroad; that he make a memorandum of the fact and date of giving the copy to the station agent, and then go home and await results. There is scarcely a doubt but that this matter will receive prompt and proper attention. If, how-

by agreement of the owners; the second is by assignment by the official fence-viewers of the township. These fence-viewers are the township trustee, clerk, and treasurer. Section 14 of this Chapter provides that 'Any such assignment or agreement, duly recorded as provided in this article,



At Anchor in Everett Harbor.
Cruising Among the Islands of Puget Sound.

Scenes on Puget Sound, in the Vicinity of Everett, Washington.

Sea Gulls' Roll Call.
A Gorgeous Sunset.
Olympics from Everett.

ings. He would not answer me, but wrote or talked to the section boss and would give me no satisfaction. The section boss told me to put a wire across the right of way on either side of the track to keep people from driving through. I did this, but a new boss has taken everything off the right of way and left it clear for stock or people to go through. We want to make hog-pasture of one side; can we make them put up a hog fence along that part? How should I proceed to have the road fenced? Can I make them put in cattle-guards at the crossings without fencing the road through?

I have been reading the KANSAS FARMER for a long time, and think your information will be more reliable than I can get elsewhere. F. DILTS.
Harvey County.

Section 18 of Chapter 70, General Statutes of Kansas reads as follows: "When any railroad runs through any improved or fenced land, said railroad company shall make proper cattle-guards on such railroad when they enter and when they leave such improved or fenced land." The next section makes the railroad company liable

road, with either a lawful or a hog-tight fence, may demand of such railroad company that it inclose its line next thereto with a lawful fence, or a hog-tight fence, and maintain the same; provided, that the hog fence defined in section 3064, laws of 1889, shall be and constitute a hog fence for the purposes of this act."

Other sections provide methods of procedure in case the railroad company fails to comply with the law. This procedure is such that the services of an attorney will be needed in enforcing the law; but Section 30 provides that where the railroad is in the wrong it shall pay a reasonable attorney's fee which becomes a part of the judgment.

But it will not probably be necessary for this correspondent to go to law to secure his rights in this matter. The editor suggests that he write a full statement of his desires and make two copies of the writing; that he cut out this inquiry and answer from the KANSAS FARMER and attach it to one copy of his statement; that, in company with a neighbor, he hand the statement and the clipping from the KANSAS FARMER to the station agent and ask him to

ever, nothing is heard from the railroad officials within a reasonable time, write to the KANSAS FARMER the facts in the case, inclosing the other copy of the statement handed to the station agent. The editor will look into the matter and try to get the case before the higher officials of the railroad and has no doubt but that the proper action will be taken including needed attention to such employees as may not have pursued the right course.

Avoid going to law, if possible.

REMOVAL OF PARTITION FENCE.

EDITOR KANSAS FARMER: A. and B. own adjoining farms. B. sells a portion next to A.'s portion of line fence. Can A. remove his former portion of line fence, compelling C. to build one-half of fence between him and A., or how should the division be made?

Cherokee County. O. A. RHOADS.

The law—General Statutes of Kansas, Chapter 153 provides two methods for determining what portion of a division fence each of the adjacent owners shall build and keep in repair. The first and best of these methods is

shall be binding upon the parties and all succeeding occupants of the lands.

In 36 Kan., case of Robertson vs. Bell, the Kansas Supreme Court, in an opinion by Justice Valentino, concurred in by the entire bench, recognized an agreement for division of fence as good without questioning whether it had been recorded.

This is equitable and fair. The last clause making the assignments "binding upon the parties and upon all succeeding occupants of the lands." Gives permanency to the divisions as made. This provision seems to make it a matter of indifference to A. what disposition B. makes of his land. The letter of this section directs A. to continue to maintain his agreed or assigned portion of the fence, while B. and his successors are left to make such arrangement as suits them for the maintenance of B.'s portion.

But in the case stated by our correspondent, desire for a new agreement comes not from the side of the fence on which a division of ownership has occurred, but from A. who might be expected to wish the old agreement to continue. If the old agreement has

been abandoned, then a new assignment will have to be made. The best way to do this is for A. and B. to agree upon the division of the fence separating their lands, and for A. and C. to agree upon the division of the fence separating their lands. If they can not so agree, the matter may be taken to the fence-viewers as provided in Sections 10, 11 and 12 of said Chapter 153.

The law nowhere confers upon either party the right to remove a partition fence so long as it is used as a partition fence by the other party. If a change be made in the division of the fence on account of partial change of ownership or other cause thus requiring different assignments, an old fence may be removed by mutual consent, but if mutual consent be not given for removal, the better way is to ascertain the value of the portion of the fence which changes ownership, such ascertainment to be followed by sale and transfer in the usual way. The fence law provides for such ascertainment of value if the parties can not agree.

The law in this case is a good guide to equity and may be followed by agreement between the parties without expense if neighbors will all try to do what is right.

A CONCESSION FROM GERMANY.

The threatened elevation of yet higher tariff barriers against the importation of American food-products into Germany has been postponed for a year. This will give time in which the American Reciprocal Tariff League may be able to secure such reasonable modifications of the American tariff as will make it possible to secure a continuance of trade relations between this country and Germany. The American farmer needs the German market. The German consumer needs American food-stuffs. It has been assumed that even if great barriers be maintained against the admission of products of German industry into this country, the necessities of the case would compel the admission of American breadstuffs and meats into German markets without an increase of import duties. There has even been manifested in some quarters a disposition to neglect the interests of American farmers, and to arrogantly say that no concessions will be made even though we lose the German markets for farm products.

The German seemed willing to make it possible to arrange mutual concessions. He enacted a dual-tariff schedule, the lower rate to be applicable to products from countries which make similar concessions, the higher rate to apply to all others. The American Reciprocal Tariff League was organized for the purpose of advocating similar reasonable enactments by the American Congress. The action of Germany in postponing the date at which in the absence of concessions from this country the higher rate should prevail, is a manifestation of a disposition to be reasonable and if possible to avoid a tariff war.

It will be remembered that in reply to inquiries from the editor of the KANSAS FARMER, Senator Long and every Kansas Congressman took positions favorable to keeping the German and other foreign markets open. This matter, affecting as it does the prosperity of the farmer, should be kept freshly in mind. It will do no harm to cause suitable resolutions to be introduced in the Congressional conventions soon to assemble. The farmer constituent is never more important in the eyes of the candidate than at nomination and election times.

ALFALFA ON LEASED LAND.

EDITOR KANSAS FARMER:—A rented a farm from B for cash rent, which has a few acres of alfalfa on it. Can A fence alfalfa hog-tight and pasture with hogs without asking B? Please publish in your valuable paper next week.

Ottawa County. G. M. SCHMIDT.

This case is not covered by statute. The equities, however, may be determined and should guide the parties at interest and would very likely guide the court in case the parties were so unfortunate as to go to law over the matter.

While it is not so stated, the inference from the statement made is that the acre of land had been seeded to alfalfa before A rented it. Unlike other meadow or pasture crops, alfalfa, if a good stand, is in the nature of a permanent improvement. To destroy or even to impair the stand of alfalfa would be unjust to the owner of the land. It is well known that hogs, especially if allowed to pasture alfalfa closely, are likely to impair and even destroy the stand. This would be unjust to B. An old stand of alfalfa may be pastured with hogs to a reasonable extent and at proper times without se-

rious danger of greatly injuring the stand. There is, therefore, possible an agreement between the parties that may be greatly to the advantage of the tenant without damage to the landlord. The landlord's consent should, however, be obtained for the use of the alfalfa for any purpose that might injure the stand unless there has been a definite agreement waiving the landlord's interest.

STUDENTS' STOCK-JUDGING CONTEST.

Recognizing the importance of interesting young men in the study and improvement of the various breeds of domestic animals, the Agricultural Association, in connection with the Animal Husbandry Department of the Agricultural College held their third annual stock-judging contest on March 5. The contest was open to all agricultural students, and great interest was taken.

Gold medals, valued from \$5 to \$20 were given as prizes to the ten men having the highest averages. The merchants and business men of Manhattan donated very liberally to the fund for the purchase of the medals.

Each contestant was required to pass judgment and write reasons on two classes of horses, cattle, sheep, and swine. The highest possible score was 600 points and the results of the contest are as follows: W. J. Brown was first with a score of 563; J. S. Montgomery, second, 488; A. J. Milham, third, 479; T. T. Baker, fourth, 473; C. F. Blake, fifth, 472; M. D. Snodgrass, sixth, 470; Harry Oman, seventh, 466; H. W. Hull, eighth, 465; Clarence Lambert, ninth, 457; W. T. McCall, tenth, 448.

TO PROMOTE THE DEVELOPMENT OF THE SOUTHWEST.

A convention of the Southwest is to be held at Saint Louis on April 16 and 17, for the purpose of securing concerted action for the further development of the great section of the country that will be represented. It is stated that the assurance of such general cooperation is received from the country interested, that there is certain to be a successful inauguration of a movement which will tend to bring into use the vast as yet undeveloped resources of a quarter of the most potent area of the United States.

The purpose is a worthy one. There seems little need for overcrowding in any industry or in any section, while there remains, only half developed, a resourceful section the use of whose potentialities needs only intelligence, skill, labor and capital to produce abundant sustenance for millions of people.

A few years ago it was not known what wealth of coal, lead, zinc, and salt in this region had waited for the hand of the developer. Yet more recently has it become known, that oil and gas in prodigious quantities, the extent of which has not yet been learned, needed only the application of the drill. What is yet under the surface of the Southwest to repay exploration can not be guessed.

The finding of these rewards for enterprise has in no wise abated, but has added to the prosperity of agriculture in the Southwest, and promises to bring to the very doors of the farmer, the market which he has sought in the distant East and beyond seas.

There ought to be an immense gathering at Saint Louis April 16 and 17, and it ought to mark an epoch in the progress of the country represented.

THE SANTA FE GOOD ROADS TRAIN.

Notice the advertisement of the Santa Fe Good Roads train in this issue. While this advertisement announces the final meeting of the series only, it is to be understood that the same conditions apply at all other points where the train stops. No expense will be spared to make a success of this series of lectures. D. Ward King, of "Split-log drag" fame, and other well-known experts will be on the train to give free lectures and demonstrations in practical road-building at each town. Stops of one day will be made at each of the following named cities: Olathe, March 26; Wellsville, March 27; Ottawa, March 28; Iola, March 29; Girard, March 30; Erie, March 31; Coffeyville, April 2; Independence, April 3; Chanute, April 4; Lawrence, April 5; Emporia, April 6; and Topeka, April 7.

There is a proposition to induce the Topeka Street Railway Co. to extend its Washburn college line a mile or two to the west so as to serve the densely peopled suburb called Seabrook. That such extension is desirable for the people of Seabrook and vicinity there is no doubt. The many dairymen of that

quarter will welcome the possibility of a daily milk car. The advent of the railroad will lead to further division of the land into small holdings, to closer cultivation, to increased population, and to greatly enhanced values of real estate. Many residents of the city like to get out into the country and do a little farming or gardening. This is especially true of clerks and laborers. The near future should make the extension a paying line for the railway company. To the layman there is no apparent reason why city railways may not extend to serve suburban communities and to do the interurban service which has proven so profitable further east.

"Concrete Construction About the Home and on the Farm," is the title of a book of 127 pages published by The Atlas Portland Cement Co., 30 Broad St., New York, whose advertisement appears in the KANSAS FARMER. This little book gives in understandable form the information which has been sought by very many inquirers among the readers of this paper. It gives specifications for mixing and handling Portland cement and for applying it to the many purposes for which it is rapidly coming into use. Write to the above-named company for a copy of the book, stating what you wish to construct of concrete.

Reports from Canadian and Kingfisher Counties, Oklahoma, state that wheat is being seriously damaged by cut-worms. The entomologist of the experiment station has visited fields where the worms are at work, and recommends spraying a strip of the wheat just ahead of the worms with Paris green at the rate of one pound to 100 gallons of water. The spraying should be done while the worms are feeding on the wheat and, of course, no stock should be allowed to pasture on the sprayed wheat.

EDITOR KANSAS FARMER:—In your issue of March 8, 1906, is a communication from G. B. Taylor, of Dickinson County, on cane hay. I have raised it for ten years and have fed it to my mares and all kinds of horses summer and winter, and I have raised colts every year. I never had any trouble. I believe that cane is as healthy as any hay that I ever fed. I have never known a horse to cough or have heaves as a result of eating it. I have been a reader of the KANSAS FARMER for four or five years. I could not do without it. I think it is the best farm paper I have ever read. L. W. Potter, Kans.

BLOCKS OF TWO.

The regular subscription price of the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address: The Kansas Farmer Company, Topeka, Kans.

Imported Percheron Mares for Sale.

Watson, Woods Bros. & Kelly Company, the well-known draft-horse importers of Lincoln, Nebraska, have a new announcement in this issue, calling attention to an extra good lot of imported mares they now offer to sell. It will be remembered that this firm made an importation of mares for the great sale held in December, but on account of an unavoidable delay the mares did not arrive in time for the sale. This is the only importation of mares that we know of, and it affords our readers a rare opportunity to buy imported mares, as very few import anything but stallions. As will be noted, the offering includes a pair of ton 5-year-old mares in foal to one of the most famous stallions in France. Also a pair of matched black 3-year-old mares weighing 2,500 pounds, one of them with a black filly at foot and the other due to foal within six weeks. Also a 2-year-old black mare weighing 1,700 pounds and with extra good bone and finish. Others include a pair of gray yearling mares weighing 3,000 pounds that are described as the making of a show team. The mares are described as absolutely sound and with the best breeding to be found in the old country. Their prices range from \$500 to \$1,000, including colts at foot. The opportunity to secure imported draft mares is very limited, and those interested in buying should not delay, as the demand for all kinds of good draft mares is very strong. See advertisers and kindly mention KANSAS FARMER when writing.

Miscellany

Money can be lost in more ways than won.

Blood is not much thicker than water when money is at stake.

When a man is a sneak all through, he knows it, and the fact that he knows it makes him a sneak all through.

Never look for truth on a tombstone. Man's christianity to man makes countless thousands mourn.

Every man pays for what he gets in some kind of coin.

A man may be measured by the things he seeks.

It is easy to mistake gas works for good works.

He can bear a great trust who can bear little trials.

The smaller a man's mind, the longer it takes him to make it up.

The seven ages of man: Baby, Willie, Will, William, Billie, Bill, Old Bill.

Many try to drown their troubles in drink; but trouble is a good swimmer.

Because a man is polite to you, don't presume that his time is without value.

Think of your own faults and you will talk less about the faults of others.

Our thoughts about others are of less importance than our thoughtfulness for others.

The difference between a strong will and a strong won't: The first is firmness; the second, obstinacy.

George Washington was so opposed to lying in any form that he refused to establish a weather bureau during his administration.

When a man reaches the age of about forty years, he then spends much of his time taking inventory of those things which he thought he knew, and sifting out that which is of no account.

Philosophical.

Dennis—"T is the ear-ly bur-rd gets th' wur-rrn, Misster Casey."

Casey—"Tis that. If ye wa-ant to keep yere head above wather these days, ye ca-ant let th' grass grow under yere feet, Misster Dinnis."—Detroit Free Press.

"Where's that twelfth juror?" exclaimed the judge, on the court's resuming business after an adjournment, scowling as he spoke at the eleven jurors in the box, one of whom rose and said: "Please, my lord, it's John Simmons as is gone. He had to go on private business; but he's left his vud-dick with me!"—London Tit-Bits.

To some true and faithful lives, the divine word never comes with any rapture or any ecstasy at all, but only like "daily bread,"—a simple, quiet faith, arming the soul for duty and keeping it unshaken before all danger.—G. S. Merriam.

Table of Contents

Alfalfa for horses and brood mares	278
Alfalfa on leased land	274
Alfalfa, starting	275
Ant-hill, only an	286
Barley	275
Breeding horse, feed and care of	279
Cottonseed-meal	279
Crop rotation, essential features of	276
a good system of	276
Dairy, how you should	294
Elizabeth, Queen	287
Feeding ration for beef	278
Feeding stock on shares	278
Feeds for hogs	278
Filters for cisterns	283
Gardening, the gentle art of	290
Germany, a concession from	274
Get to work (poem)	285
Good-roads train, the Santa Fe	274
Gophers, destroying pocket	276
Hog pasture	275
Incubator, how to use an	292
Insects, timely remarks about	283
Japanese currency	284
Japanese discipline	284
Japanese boy's letter	285
Japan, facts about	284
Jewell reading club, the	287
Master's annual address (grange)	282
Milk fever, concerning	295
Mud pies (poem)	286
Neesima	294
Paint, making skim-milk	294
Partition fence, removal of	273
Poultry notes	273
Railroad cattle-guards and fences	273
Recipes, tested	284
Roup	292
Seeding questions	277
Southwest, to promote the development of	274
Stock-judging contest, students	274
Sunday-school lesson	287
Tower shan't be tied to-night (poem)	284
Veterinarian, the	293
Warbles	278
Zodiac, signs of the, have they influence	279

Agriculture

Burley—Hog Pasture.

I have been watching the results of experiments as stated in your paper, and find them of great help; but there are some things I do not see in it, and would like to suggest a change in the small-grain crop for Kansas farmers, also to get a little advice concerning the same. It seems to me that we could use other small grains beside millet, oats and spelt, and that we could realize fully as large a profit as from any of these by sowing barley. I would like to know if barley is adapted to this section of Kansas, and the best method of sowing and harvesting it. It is said to make one of the best feeds for all kinds of stock raised on the farm. I would like to hear from some one who has had experience with this crop and the best variety for this country, and to know where seed can be obtained.

I wish to prepare a permanent pasture for hogs by sowing some kind of grass with clover, and have been advised to sow in June in growing corn just before the last plowing and that by next spring it will be ready for hogs to be turned into. Do you recommend this, or would it be better to spring sow with a nurse-crop? For summer pasture I usually sow equal parts of rape, oats, and cane-seed. Can you suggest an improvement on that? One more: is the Mammoth White Dent corn adapted to this section of Kansas?

OTIS, WARRENSBURG.

Nemaha County.

Barley succeeds very well at this station. As an average for three crops of common Six-rowed barley, the best producing barley tested at this station, a yield of 35.8 bushels per acre has been given; this is 1,518 pounds of grain per acre. In the same period the Sixty-day oats, the best-producing variety of oats out of some thirty tested, has given an average yield of 46.8 bushels per acre, or 1,498 pounds of grain per acre each year. While several other varieties of barley have yielded nearly as much as the Six-rowed, the Texas Red oats which are really the standard variety in Kansas, have yielded only 39 bushels per acre as an average at this station; this is only 1,248 pounds of grain per acre. On the whole, therefore, barley has proved to be the superior crop. At this station I consider barley harder than oats. The claim is that when chinch-bugs are prevalent, barley is the crop most attacked, and this may be an objection to the crop in some years; but barley is certainly a better drouth-resister than oats and will stand more hot weather; and in trials at this station has produced, on the average, not only larger yields but a better quality of grain than oats. At this station the best-producing varieties in the three-year test are: Common Six-rowed, 35.8 bushels; Bonanza, 34.4 bushels; Mansury, 24.1 bushels; Mandscheuri, 32.2 bushels; and Success Beardless, 35.5 bushels per acre respectively. We have seed for sale of the Bonanza, common Six-rowed, and Mandscheuri varieties at prices given in circular which I mail you under separate cover. You can secure seed barley from Western seedsmen.

Barley is sown and handled very much as oats. We usually sow about 2 bushels per acre as early in the spring as we sow any grain. Barley makes good feed for stock, ground and fed with other feeds; or it makes a very fair fattening food when fed alone to hogs and cattle. When the grain is not ground it should be soaked when fed to stock.

Alfalfa makes excellent pasture for hogs. If you desire a grass-pasture I have been recommending a combination of English blue-grass, Bromus inermis and red clover; sow about 12 pounds of each of the grasses with 3 or 4 pounds of the clover per acre. I prefer to sow early in the spring without a nurse-crop. Grass sown in this way on fairly clean land, will make a good start and furnish considerable late summer and fall pasture. If sown with grain as a nurse-crop, about three times out of five you will fail to secure a stand, and you get no use of the grass the first season.

Early-fall seeding of the grasses named is also practicable. Sow about the first of September without a nurse-crop on a well-prepared seed-bed. Clover, however, should be seeded in the spring and not in the fall. Bromus inermis seeded in the spring at the station yielded 1½ tons of hay the next season and furnished considerable fall

pasture. It is not advisable, however, to pasture spring seeding until late in the summer, or in the fall and then only lightly. It is true also of fall seeding that it should not be pastured too early the next season, but if possible should produce a hay crop before the field is turned to pasture. I do not favor the method of sowing in corn at the last cultivation. In a wet season it may answer very well, but there are too many chances of losing the seed, and at least of getting a poor stand of grass or clover.

Your combination of rape, oats and cane for a summer pasture is a good one; you might include field-peas in the combination named. At this station cow-peas alone make good late-summer and fall pasture, also a combination of cow-peas and corn, or cow-peas and cane. The cow-peas are a little later crop than the rape, oats, and cane combination. We have found that sowed sorghum, or sowed Kafir-corn, or sowed corn makes good late-summer and fall pasture.

Mammoth White Dent corn is a late-maturing variety and may not be so well adapted for growing in your part of the State as some earlier maturing sorts, such as Boone County White, Silver Mine, Farmer's Interest, or McAuley's White Dent. The Hammett White Dent is also well adapted for growing in Northern Kansas. This is a native Kansas corn and has been grown in Marshall County for fifteen or twenty years. A. M. TENNEY.

Starting Alfalfa.

O. H. ELLING, SUPERINTENDENT FORT HAYS EXPERIMENT STATION.

As alfalfa is costly to seed, it pays the farmer little to experiment along this line, but he should rather benefit by the experience of others. Of course it is impossible to lay down a set of iron-clad rules on account of the great variation in soil and climatic conditions, although there are some general principles that apply to a wide range of conditions. Many failures to get a stand of alfalfa are due to not giving it a fair trial. Alfalfa is a difficult plant to cultivate; its needs must be carefully studied, and it should be given every possible care and attention.

The first important step in the selection of the field is to secure a convenient location, one that is adapted for growing this crop. As alfalfa, well started, will be a profitable crop for ten to twenty years without reseeding, it is quite an item to have the field so situated as to best improve the many advantages it affords to the farmer. If possible, locate it near the farm buildings, as alfalfa is a very profitable pasture for all kinds of farm poultry, as well as hogs and horses; and if bees are kept, they not only make honey from it, but are a necessity in the production of seed. It is also good for the eye to look upon. The field must be well fenced to keep off wandering cattle or sheep, as to these it is dangerous for pasture, frequently causing instant death by bloat.

The chief essential to be considered in the choice of field is the nature and lay of the land. Alfalfa will grow anywhere in the State so far as altitude is concerned. If possible, select a smooth, level tract which is well drained and not swampy. While alfalfa needs water and needs it in large quantities, it will not grow on wet, soggy ground, or with the water-table too near the surface. Rich river and creek bottoms, if not subject to prolonged overflows and well drained, afford ideal conditions for growing this crop, though smooth upland if rich, produces a very profitable yield of a choice quality of hay, being less stemmy than that grown on the bottom-lands. Do not save your most fertile land for what you believe to be the "money" crop; for if you get alfalfa started on the right kind of land, no other crop will bring better income; while, on the other hand, few other crops will cause one to lose money faster than will alfalfa when repeatedly seeded on thin, shaly land.

The well-test auger might often be used to advantage in examining the lower soil before sowing alfalfa-seed. If we find that the ground is underlaid with a layer of rock, a stratum of dry sand, or a tough, hard layer of shale close to the surface, we may rest assured that alfalfa will not reach its highest perfection. On the other hand, if we find a deep, alluvial, sandy loam of calcareous origin, with the underflow anywhere from 10 to 50 feet below the surface, the conditions are ideal and alfalfa will be one of the most profitable crops a farmer can put on such land.

Alfalfa will grow on a variety of soils, though usually it yields better on

light than on heavy soils; but in many localities it grows on the heavy, gumbo flats. Lime is an essential element in the soil; consequently alfalfa is better adapted to localities with "hard" water than those with "soft" water. It thrives well on very sandy soil provided the water-table is near the surface and within easy reach of the plant. While alfalfa roots deeply, it is not absolutely necessary for the soil to be of great depth, providing of course that it is sufficiently moist and contains plenty of plant-food.

SEED-BED.

While the mature alfalfa is a vigorous, deep, gross feeder, renovating and enriching the soil, the young plant, on the other hand, is tiny, delicate, and frail, and must have ideal conditions for the first year of its life. The soil must be in a perfect physical condition, containing plant-food in an easily available form and moisture sufficient so the young life of the plant will not depend entirely upon the rainfall.

It is absolutely useless—a waste of money and human effort—to sow alfalfa on a poorly prepared seed-bed. A good stand is frequently secured on newly broken land if the seed-bed has been well prepared; while on the other hand, many failures to get a stand on old ground are due entirely to the shiftless preparation of the land. As alfalfa is costly to seed, it is desirable to get the land into the best physical condition possible, even if it takes two or three years to do it. Summer fallow, clean culture is important, or the ground should be free from weeds by growing on it some cultivated crop which requires frequent cultivation, as it promotes the germination of the weed-seeds so they may be destroyed and the land made clean for alfalfa.

The seed-bed should be gradually deepened until the desired depth is reached, which is about 6 to 8 inches, thus forming a good reservoir for moisture which is an important factor in the West. The subsoil should be mellow, yet compact and covered with a two-inch mulch of fine soil. The seed-bed should always be considered as the home of life. Air is an absolute necessity for all living things, though the amount of ventilation or aeration necessary for the best results depends largely on the nature of the soil, the crops grown and the climate. Some soils are tight, firm and run together, needing proper cultivation, and the addition of humus to bring about the desired conditions. Other soils are too open and porous, thus allowing a too-free circulation of air and causing excessive loss of moisture by evaporation. This latter condition is more prevalent in the semi-arid regions. Summer fallow is often desirable in regions of light rainfall, not only to kill the weeds but to conserve moisture for one entire season, so that the young alfalfa plant will have sufficient moisture to develop its root-system, after which it is able to withstand many hardships. Where the annual rainfall averages from 15 to 25 inches the water must be handled very economically and the soil must be in such a mechanical condition as to take it up when it comes, and such methods of cultivation must be applied to the soil to best preserve the moisture for the use of the crops.

Before seeding, be sure to have a good supply of moisture in the soil; otherwise, the seed is worth more in the sack. We find the early spring the best time to sow. I should rather risk the frosts of early spring than the weeds and dashing rains later. In some parts of the State, fall-seeding is desirable because of the absence of crab-grass and other troublesome weeds. In this section and in the West, early fall seeding has proven successful, and has this advantage: that the weeds need not be mowed, as is necessary with spring sowing, thus saving labor and time, and the next year a fair crop of hay is secured. Fall seeding had best be done early—about August

and the seed-bed should be in ideal condition, containing sufficient moisture so that the young plants be rapidly developed and able to withstand the winter freezes. Even then, alfalfa is often winter killed by severe weather.

The kind of seed is a very important consideration because our success or failure will depend largely upon the seed; and since we have already put much work on the land and since alfalfa-seed is expensive, we should select judiciously. It should be tested for purity and germinability. Alfalfa is difficult to clean thoroughly and it often contains obnoxious weed such as crab-grass and foxtail. In handling alfalfa intended for seed it is often allowed to heat, either in the stack or

Wire Fence 29c

48-in. stock fence per rod only
Best high carbon cold steel spring wire
Catalog offices, tools and supplies FREE
Buy direct at wholesale. Write today.
MASON FENCE CO. Box 62, Leavenworth, Kans.

\$7.00 Daily Av. selling Only Pump Equalizers
Make all pumps work easy. Windmills run in slightest wind. Fits all
Pumps. Merit sells them. Fully War-
ranted. Exclusive territory. Write
Equalizer Mfg. Co., Waseca, Minn. Dept. 13

FENCE STRONGEST
MADE. Built
on-tight. Sold to the Farmer at Wholesale
Prices. Fully warranted. Catalogue Free.
COILED SPRING FENCE CO.,
Box 255, Winchester, Indiana.

LAWN FENCE
Made of Steel. Lasts a lifetime. We have no Agents.
Sold to users at Wholesale Prices.
7 cts. a foot up. Cheaper than wood. Catalogue Free.
KITTELMAN BROTHERS,
Box 399, Muncie, Indiana.

Page Fence Outlasts the
first users. Why? Because its hori-
zontal wires are high-carbon, double-
strength wire; its heavy cross bars
are so securely woven that the fence
cannot come to pieces, and the
whole fabric is heavily galvanized.
PAGE WOVEN WIRE FENCE CO.
Box 7864, Adrian, Mich.

IWAN'S POST HOLE AND WELL AUGER
Best earth auger in the world. For Fence and
Telephone Post Holes, Wells, etc. Three times
the work accomplished with an
Iwan Auger than with
any other. Makes
holes smoothly and
quickly; empties easily; is very durable. Used by U.S. Gov't. 8, 4, 6,
6, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample
at special price to introduce. Agents Wanted. Inquire of dealers or write
direct for particulars. **IWAN BROS., Dept. No. 1, Streator, Ill.**

SIA .00 Sweep Feed | SIA .00 Galvanized
We manufacture all sizes and
styles. It will
pay you to in-
quire for our
price list.
CURRIE WIND MILL CO.,
Topeka, Kansas.

SCALES ALL STYLES LOWEST PRICES.
30 DAYS FREE TRIAL **PITLESS** **FREE CATALOGUE**
AMERICAN SCALE CO. 304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

WELL DRILLING MACHINES
Over 70 sizes and styles for drilling either deep or
shallow wells in any kind of soil or rock. Mounted
on wheels or on stilts. With engine or horse powers.
Strong, simple and durable. Any mechanic can
operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.
Have hauled about 4,000 tons of hay with my
press the last four years and expense for re-
pairs has been between \$4 and \$5 during that
time. Fred Simpson, Gridley, Kans.

EUREKA BOILER or STEAM FEED COOKER
Saves half your corn or other feed. Saves
labor by feeding. It will steam mouldy hay or corn perfectly
sweet. Makes corn stalks or straw perfectly palatable. Write
for information.
John Deere Plow Co., Muncie, Indiana.

Modern Silage Methods
That is the title of our new 216 page book. It
tells everything anybody could possibly want to
know about the silage subject. You can't think
of a question that it doesn't fully answer. How
to build, from foundation up, all kinds of silos.
All about the crops and how to cut and fill. How
to feed, with the most complete feeding tables
ever published. About 40 illustrations help to
make things plain. Used as a text book in
many Agricultural Colleges. We have always
sold the book for 10 cents, lot for a limited
time, to any reader who will ask for it, and name this paper, we will send a
copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

MIXED FARMING**Wheat Raising
Ranching**

Three great pursuits have again shown wonderful results on the

**FREE
HOMESTEAD LANDS
of****WESTERN
CANADA**

Magnificent Climate—Farmers plowing in their shirt sleeves in the middle of November.

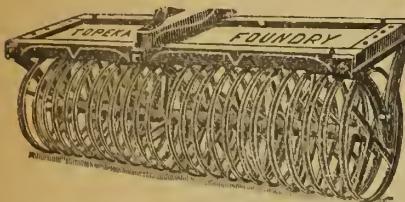
"All are bound to be more than pleased with the final results of the past season's harvests."—Extract.

"Coal, wood, water, hay in abundance—schools, churches, markets convenient. This is the era of \$1.00 wheat."

Apply for information to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.**High Grade Paints
at Reasonable Prices**

We use good mineral and pure linseed oil. We are also distributors for Wing's Fire Proof Oil Paints. Write for descriptions and prices.

KANSAS CITY PAINT COMPANY
1803 West 39th St., Kansas City, Missouri**DROUTH DEFIER****NEVER LOSE A CROP**

If you use the Topeka Foundry Packer, Pack surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

**Two
Years
Test**

You don't want to make a mistake when you buy a buggy. We arrange matters so you can be sure you are right. We have our own factory and make what we sell. We will ship you this buggy or any other vehicle you may select from our catalog on

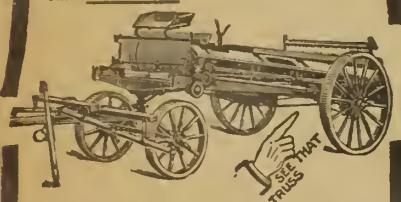
**30 Days Free Trial
Freight Prepaid**

Then if you can find any flaw in it within two years we will replace it free and make you satisfied. Are we fair? We couldn't do this if we were selling other people's goods. And we couldn't do it unless our own were of highest quality. Don't forget, our prices are just about half dealers' prices. Send for catalog showing all styles, and see for yourself. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

**Before you buy that
Manure Spreader**

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader has all these important features and many others equally as important. Write to-day for free catalog and special prices and terms.

APPLETON MANUFACTURING CO.

19 Fargo Street, Batavia, Ill., U. S. A.

sack and the result is that only a low per cent will germinate. Such seed is usually of a brownish yellow or dark color, while good alfalfa-seed is of a greenish yellow, or brown color. Since alfalfa has a peculiar habit of adapting itself quickly to change of environment, it is no doubt best to obtain seed from plants grown under the same climatic conditions as those of your own locality. A nurse-crop is usually undesirable as it robs the young alfalfa of its plant-food and moisture.

By mixing alfalfa-seed with cornmeal of about the same fineness as the seed, in the proportion of two parts seed to three parts cornmeal, seeding may be done with a common grain-drill, setting the drill to seed two pecks of wheat per acre. We use the Superior disk-drill with press-wheels. It is best not to put the seed in too deep, but just to the moisture, then cover shallow, about one inch. The press wheels help to firm the soil about the seeds and stimulate germination.

The amount of seed required per acre is dependent upon the condition of the soil, the manner of seeding, and the quality of the seed. It is my opinion, however, that much alfalfa-seed is being wasted annually in the State of Kansas by putting it on too thick. Ten pounds per acre of good alfalfa-seed is ample.

We have three strains of alfalfa well-started on the highest upland at the branch station and it gives promise of a profitable crop. While it does not yield so many pounds to the acre as the hay on the bottom-lands, yet it is of a choice quality with a large percentage of leaves and is, therefore, richer in protein than more rank alfalfa.

On account of alfalfa's being a rather coarse plant and difficult to keep when put in stack, we bale it directly from the field and store it in the barn. After it is wilted in the swath we use a side-delivery rake to put it in the windrow, and if the weather is threatening rain we put it in shocks to cure; otherwise we leave it in the windrow until it is well cured, then with a sweep-rake draw it to the baler. The man who ties puts the bales from the press on a low, flat wagon, and at noon and evening they are hauled in and put in the barn. This method proves to be almost as economical as stacking, and is more satisfactory. At Manhattan the silo is used, and when the alfalfa is ready to cut and the weather is unfavorable for haying, the alfalfa is put directly into the silo and is a very valuable feed as silage.

In rotation with our common crops, alfalfa is very worthy of consideration. Unfortunately, the subject of crop rotation is very much neglected in this section of the country, but it is an important topic if the fertility of our soil is to be retained. It is an enricher of the soil because it belongs to the famous family of leguminous crops which have the power under certain conditions, of gathering free atmospheric nitrogen and storing it in the soil, or building it into their tissues for the nourishment of growing animals.

Alfalfa increases the nitrogen in the soil. It improves the soil tilth by shading the ground, and by adding humus through the decaying of its large, deep-growing roots, and at the same time it frees the land from weeds. If you have no alfalfa on your farm, study the plant, its needs, your soil, and try hard to make it one of your farm crops. Alfalfa is good for the farmer's soil, it is good for the farmer's stock, and it is good for the farmer's pocketbook.

Directions for Destroying Pocket Gophers.

DAVID E. LANTZ, ASSISTANT, U. S. BIOLOGICAL SURVEY.

Pocket-gophers infest all the States and Territories west of the Mississippi, and parts of Illinois, Wisconsin, Florida, Georgia, and Alabama. They occur also in Southwestern Canada and over the greater part of Mexico. All the species live underground in ramifying tunnels, and all bring to the surface quantities of earth, which is heaped up in the shape of mounds. The habits of these animals are everywhere much the same.

Throughout their range, pocket-gophers are very destructive to crops. They eat the roots of fruit-trees and in this way sometimes ruin whole orchards. They eat both roots and tops of clover, alfalfa, grasses, grains, and vegetables, and are especially harmful to potatoes and other tuberous crops. In addition to all this, they throw up innumerable mounds of earth in meadows, pastures, and grain-fields, which cover and destroy far more of the crop than is eaten by the animals or killed by having the roots cut off. These

mounds also prevent close mowing, so that much of the hay-crop is lost, and the pebbles they contain often break or injure farm machinery. The loss due to gopher mounds in the clover- and alfalfa-fields in some of the Western States has been conservatively estimated at one-tenth of the entire crop. In many of the fertile valleys where they abound the animals are by far the most formidable of the farmer's mammalian enemies.

Pocket-gophers may be destroyed by



GOPHER RUNAWAY.—a, mounds of loose soil; b, laterals leading to mounds, usually closed with earth; c, main runaway, usually clean.

poison, by traps, and by the use of carbon bisulfid.

POISONING POCKET-GOPHERS.

Poisoning with strichnine is the most effective means known for killing pocket-gophers, and, as it involves the least expenditure of money and labor, the Biological Survey recommends it for general use. As a rodent poison to be used by farmers, strichnine has several advantages. Its action is sure, its deadly character known to most persons, and its bitter taste is an additional safeguard against mistaking it for a harmless drug. Strychnia sulfate is the most convenient form of the poison, since it is freely soluble in hot water and in the natural juices of vegetables used as bait. To disguise its bitterness so that rodents may not be deterred from eating the baits, sugar is often employed, or the strichnine may be mixed with its own bulk of commercial saccharine. A sugar syrup poisoned with strichnine may be used with excellent results. It is prepared as follows:

Dissolve an ounce of strichnia sulfate in a pint of boiling water. Add a pint of thick sugar syrup, and stir thoroughly. The syrup is usually scented by adding a few drops of oil of anise, but this is not essential. If preserved in a closed vessel, the syrup will keep indefinitely.

The above quantity is sufficient to poison a half-bushel of shelled corn or other grain (corn recommended). The grain is steeped in hot water and allowed to soak over night. It is then drained and soaked for several hours in the poisoned syrup. Before using, cornmeal may be added to take up the excess of moisture.

Dry crystals of strichnine also may be used. They are introduced, by means of a knife, into small pieces of potato, carrot, or sweet potato, or into entire raisins or dried prunes. A single large crystal (or several small ones) is enough for each bait. Raisins are especially recommended because they are easily handled and contain enough sugar to disguise the bitterness of the poison.

The prepared baits are introduced into the underground runways of the gophers and are conveniently handled with a spoon. A stout dibble is used to make holes into the runways. This consists of a spade handle shod with a metal point and having a strong bar for the foot of the operator about 15 inches from the point.

Having located the runway by use of the dibble, it is moved from side to side to make the soil firm about the hole, and then withdrawn. A piece of poisoned potato or raisin or a teaspoonful of the poisoned corn is dropped into the hole, which is left open. Some farmers prefer to cover the holes, but the experience of the writer is against the practice.

By this method but little labor is necessary, and the operator soon acquires skill in finding the runways. The bait should be placed in the main runways and not in the short laterals near the mounds (fig. 2). If placed in the laterals, the animals are likely to cover it with soil or throw it out without finding it. A skillful operator can go over 20 to 40 acres of badly infested land in a day, and, if the work is carefully done at a time when

the pocket-gophers are active, all the animals should be destroyed by the first application of poison.

TRAPPING POCKET-GOPHERS.

Trapping is a successful method when followed intelligently and persistently. It is especially adapted to small fields, orchards, and gardens, where only a few gophers are present; but in the case of large areas that are badly infested, the method involves too much labor.



For trapping gophers an ordinary No. 0 steel trap may be employed, but there are a number of special gopher-traps on the market that are better adapted for general use.

In using the ordinary steel trap, the first step is to make an opening into the main gopher tunnel. The trap should then be sunken so that the jaws are level with the bottom of the runway and lightly covered with green clover or alfalfa or grass, or even loose soil, care being taken that these do not clog under the pan, or trigger. No bait is required. The hole should be just large enough to receive the trap and should be covered so as almost to exclude the light.

Besides the ordinary steel trap, various gopher-traps have found favor with farmers. Several traps are on the market whose main advantage lies in the ease and simplicity of operation and in the fact that they kill the animals instantly. All of them have been found to be excellent, but the simpler ones have advantages over those with closed sides. These special traps should be set in the laterals leading into the main tunnel of the gopher, or at the entrance of open burrows where fresh earth is being thrown out. The trapper should choose the freshest of a series of mounds and dig along the lateral until it is found clear of soil.

CARBON BISULFID.

Carbon bisulfid has been employed for killing pocket-gophers, and under favorable conditions its use is recommended. If the burrows are extensive or the soil dry, the gases are dissipated so rapidly that a large quantity of the liquid is required to kill the animals and the method becomes too expensive. If, however, the burrows are simple and the soil moist, bisulfid may be used successfully. For pocket-gophers an ounce of the liquid for each burrow is sufficient. The carbon bisulfid is poured over a bunch of cotton, rags, or other waste material and this quickly pushed into the burrow, which should be closed at once.

COOPERATION.

Any farmer may readily rid his premises of gophers by the use of poison or traps. Unless, however, the entire community unites in active and intelligent cooperation in the destruction of the animals, the cleared area will be sooner or later invaded from neighboring premises, and the work of destruction must be repeated. Cooperation only will effect a radical cure. When cooperative efforts for the extermination of gophers over a considerable area are attempted, careful attention must be given to waste lands along fences, streams, public highways, and railroads. Such places are favorite haunts of the animals, because in them are found loose, sandy soil, moisture, and succulent roots for food. It is from such resorts that adjoining farms are often restocked with pocket-gophers.

Essential Features of a Good System of Crop Rotation.

D. H. GRIPSON.

Since no two farmers own farms with exactly the same kind of soil, or have the same circumstances under which to labor, or have the same desires or ideals which they wish to reach, it would be impossible to outline a definite system of crop rotation that would apply to each and every farm. In presenting this subject, therefore, I shall not endeavor to lay down any hard-and-fast rule for crop rotation, but will give some general principles which each individual farmer should apply to his own conditions.

The reasons that crop rotation is

usually a good practice may be divided into two classes:

1. Those which concern the immediate profit of the farmer. Under this head we may consider the following principles: (a) Crops should rotate so as to make the best use of the moisture in the soil. (b) Crops should rotate so as to distribute the labor through the different seasons of the year. (c) Crops should rotate so as to keep down weeds and eliminate diseases and insects. (d) Strong feeding crops should follow the weaker feeding ones.

2. Those which relate to maintaining or increasing the fertility of the soil. Under this head we may consider the following principles. (a) Crops should rotate so as to use preceding crops' residue. (b) Rotations should contain legumes in order that the nitrogen of the air may be transferred into the soil. (c) The rotation should not contain a large proportion of exhaustive crops. (d) Deep- and shallow-rooted crops should alternate.

In explanation of the principles of the first group we offer the following discussion:

Crops should rotate so as to make the best use of the moisture in the soil. Perhaps as good an illustration of the non-observance of this principle as any under common observation, may be seen when a farmer grows wheat on ground from which he has just harvested a luxuriant growth of Kafir-corn or cane. The poor crop of wheat following these crops is generally attributed to the exhaustive effect of the latter upon the soil, and this may be true to a certain extent, as these crops mature late in the season and produce so abundantly that they probably draw heavily upon the available amount of plant-food, but the greater defect generally lies in the fact that the Kafir-corn or cane made a rapid growth late in the season, and being rather deep-rooted crops drew most of the moisture from the soil. It would be far better to put the fall crops on ground that had been plowed immediately after harvesting some earlier crop, or if put in stalks it should be put in the field that matured earliest. If there are abundant fall rains, this precaution may not be necessary, but it is generally a safer plan to farm so as to save as much water as possible whether it may be needed or not.

To realize the importance of distributing farm work, it is only necessary to visit a locality where wheat alone is grown. There we see at harvest time a great rush. Men are in demand at high wages, horses are worked beyond reason and everything gives way to the harvest of the great crop. The rush abates somewhat when the wheat is in the stack, but there is extremely hard work until the thrashing, plowing and seeding are done in the fall, when comparatively all labor ceases until the next harvest. The man who keeps some stock and raises a variety of grain and forage crops, does not have such a rush of work at any time, but has his work distributed so as to permit him to do a good share of it himself or to keep a regular force of men throughout the whole year.

The necessity of keeping down weeds is evident to any intelligent farmer. If any crop is conducive to the propagation of certain weeds, it is best to follow it by a crop that will permit of the most effectual operations against the weeds, or will so shade the ground or make such a vigorous growth as to choke or crowd out these pests. In general, small grains should be followed by cultivated ones for the above reasons.

If smut, rust, or other diseases are bad in small grain, rotation should provide for a crop to follow them which is not affected with these diseases. If wheat is infected with the Hessian flies, a year or two of cultivation will eradicate them; but, of course, if other parties near-by continue to raise wheat this will do little good.

Farm crops may be divided, according to their ability to take plant-food from the soil, into strong feeders and weak feeders. After a legume or grass crop has been plowed under, we find that the soil contains more humus and more plant-food than it did before the grass or legume was sown on the ground. Rotating the crops in accordance with the principles as named in the outline, we sow our weakest feeding-crop after the grass or alfalfa, but this is not always best, as some weak-feeding crops are over-stimulated under such conditions. For instance, if our rotation consists of alfalfa, oats, or corn and wheat, we should sow them in the order named, according to the above principle. But if we were to sow oats after alfalfa, they would undoubtedly make such a rank growth

that they would lodge and rust badly. Corn would not be thus effected, hence we would grow the corn after the alfalfa, making the rotation alfalfa, corn, oats and wheat. The above rule, however, would hold good in most other cases. For instance, cane and Kafir-corn should be placed at the end of the rotation, that is, when it is intended to be sown to alfalfa or grass again.

Crops should rotate so as to use the preceding crop's residue. The grass and legume crops produce more humus than they use. In the tillage of the cultivated crops more humus is oxidized than these plants produce, hence it is important that these plants should alternate, as all soils should have a liberal supply of humus since it aids in holding moisture, furnishes plant-food, and gives a good physical texture to the soil. The legumes, through organisms that live on their roots, gather nitrogen from the air and deposit it in the growing plant, and the decomposition of these plants adds available nitrogen to the soil. By alternating these legumes with the grain-crops, the latter are furnished with nitrogen which is so essential to their maturity.

Deep- and shallow-rooted plants should alternate. This principle is very important for two reasons. It gives the subsoil a better texture and makes it more easily permeated by water and by the roots of plants. The deep-rooted plant brings the plant-food from the subsoil to the surface and deposits it where it is available for shallow-rooted plants. Grain and cultivated crops tend to make the soil open in texture. Grasses and legumes tend to bind the soil particles together. All soils should undergo periodic compacting and loosening processes. Sandy soils are most improved by those methods which compact and bind the soil particles together, while heavy clay soils are most benefited by the opposite treatment. Those crops which add humus will improve the texture of almost any soil.

On account of the varying conditions, there are no hard-and-fast rules for farming; but if the above discussion is applied with common sense it will probably be found not far wrong. The question has been settled that we must have a rotation of crops, but the problem is, what that rotations shall be.

Seeding Questions.

We wish to sow several acres to clover, redtop and English blue-grass this spring, and later to try alfalfa, although we are told that alfalfa and brome-grass are failures in this country.

Please send such bulletins as we need, including one on cow-peas. Our soil is somewhat sandy. The permanent pasture and parts of the bluestem meadow are more or less studded with outcropping sandstone. Would an application of lime pay? If so, please publish instructions. If soil is taken from an alfalfa-field where leaf-blight has been, is there danger of transmitting the leaf-blight where the soil is applied?

D. NEWBY.
Cherokee County.

I would leave out redtop from the combination of grasses and clover which you name, except perhaps on the lowest, wettest land. Redtop is not likely to succeed well on the sandy land which you describe. This grass is adapted to wet land and is really a grass of poor quality as compared with others, and should not be sown where better grasses will grow. On well-watered land in your section of the State, timothy might be used in place of redtop, but on the sandy land described perhaps the timothy will not succeed so well as English blue-grass. The Bromus inermis should succeed well on the sandy land, and I would recommend sowing the Bromus inermis with English blue-grass and clover. Supposing the Bromus inermis should not succeed so well as the English blue-grass, you might sow less of it, sowing 5 to 6 pounds of the Bromus inermis with 20 pounds of English blue-grass and 4 or 5 pounds of clover per acre. I would continue to try alfalfa on well-drained land, but not on wet, sub-irrigated land. A light application of lime on the land in question, previous to seeding alfalfa, might give some beneficial effects.

There would be danger of transmitting the leaf-blight fungus by using soil for inoculating the new land in which leaf-blight has prevailed. I think it advisable, however, to try inoculating the seed or the soil with the bacteria which grows on the roots of the alfalfa plants. It may not be advisable to try inoculation on a large scale at first, but try an acre or so by

WHO SHE WAS

SKETCH OF THE LIFE OF LYDIA E. PINKHAM

And a True Story of How the Vegetable Compound Had Its Birth and How the "Panic of '73" Caused It to be Offered for Public Sale in Drug Stores.

This remarkable woman, whose maiden name was Estes, was born in Lynn, Mass., February 9th, 1819, coming from a good old Quaker family. For some years she taught school, and became known as a woman of an alert

restore the family fortune. They argued that the medicine which was so good for their woman friends and neighbors was equally good for the women of the whole world.

The Pinkhams had no money, and little credit. Their first laboratory was the kitchen, where roots and herbs were steeped on the stove, gradually filling a gross of bottles. Then came the question of selling it, for always before they had given it away freely. They hired a job printer to run off some pamphlets setting forth the merits of the medicine, now called Lydia E. Pinkham's Vegetable Compound, and these were distributed by the Pinkham sons in Boston, New York, and Brooklyn.

The wonderful curative properties of the medicine were, to a great extent, self-advertising, for whoever used it recommended it to others, and the demand gradually increased.

In 1877, by combined efforts the family had saved enough money to commence newspaper advertising and from that time the growth and success of the enterprise were assured, until today Lydia E. Pinkham and her Vegetable Compound have become household words everywhere, and many tons of roots and herbs are used annually in its manufacture.

Lydia E. Pinkham herself did not live to see the great success of this work. She passed to her reward years ago, but not till she had provided means for continuing her work as effectively as she could have done it herself.

During her long and eventful experience she was ever methodical in her work and she was always careful to preserve a record of every case that came to her attention. The case of every sick woman who applied to her for advice—and there were thousands—received careful study, and the details, including symptoms, treatment and results were recorded for future reference, and to-day these records, together with hundreds of thousands made since, are available to sick women the world over, and represent a vast collaboration of information regarding the treatment of woman's ills, which for authenticity and accuracy can hardly be equaled in any library in the world.

With Lydia E. Pinkham worked her daughter-in-law, the present Mrs. Pinkham. She was carefully instructed in all her hard-won knowledge, and for years she assisted her in her vast correspondence.

To her hands naturally fell the direction of the work when its originator passed away. For nearly twenty-five years she has continued it, and nothing in the work shows when the first Lydia E. Pinkham dropped her pen, and the present Mrs. Pinkham, now the mother of a large family, took it up. With women assistants, some as capable as herself, the present Mrs. Pinkham continues this great work, and probably from the office of no other person have so many women been advised how to regain health. Sick women, this advice is "Yours for Health" freely given if you only write to ask for it.

Such is the history of Lydia E. Pinkham's Vegetable Compound; made from simple roots and herbs; the one great medicine for women's ailments, and the fitting monument to the noble an whose name it bears.

carefully spreading 300 or 400 pounds of the infected soil on an acre and mixing it with the soil of the field by cultivation previous to seeding the alfalfa, or you may use the nitroculture preparation and inoculate the seed before seeding.

I have mailed you copies of press bulletins Nos. 125 and 129, giving information regarding the preparation of

seed bed and the seeding of different grasses. I have also mailed you copy of bulletin No. 114, treating on alfalfa. We have no bulletin on cow-pea, but I have mailed you a copy of a letter answering questions on the planting and culture of this crop, and have sent you a circular letter giving instructions regarding the use of lime as fertilizer.

A. M. TENNEY.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or to be advertised in this paper.

March 20-22, 1906—Combination sales of Shorthorns, Herefords, Aberdeen-Angus and Herefords at Kansas City; R. A. Ford, Manager, Lawson, Mo.

March 23, 1906—Shorthorns by Shawnee Breeders Association at Topeka State Fair Grounds, I. D. Graham, Secretary, Topeka, Kans.

April 13, 1906—Janes Stock Farm, Willard, Kans., trotting brood horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gifford, Wakefield, Kans.

May 1, 1906—Geo. Allen, Omaha, Neb., Shorthorns.

A Feeding Ration for Beef.

I am feeding 27 calves and 5 cows and want to get the best gain possible. I have been feeding them about forty days and have them on full feed, but they do not seem to gain as fast as they should. I am feeding between 9 and 10 bushels (by weight) per day of corn-and-cob-meal with alfalfa for roughage. The last week I fed 2 quarts per day of Wilbur's Stock Food, mixed with the meal. Do you think it best to feed all the alfalfa they will eat? When I keep plenty of alfalfa before them they do not eat so much meal. Do you think it would be better to feed oil-meal in place of the stock food? This is my first attempt at cattle-feeding, and any suggestions you make will be gladly received.

Trego County. ERA C. HITT.
I could hardly suggest a better ration for your cattle than corn-and-cob-meal with alfalfa for roughage. I think you will find it more economical to let them have all the alfalfa they will eat, but the cattle will not finish so quickly. If you are feeding nine or ten (seventy pounds) bushels per day of corn-and-cob-meal per head, it seems to me that the cattle are consuming an unusually large amount of grain. I would advise you to so regulate the amount at each feeding that it will all be consumed before the next time, in order that the cattle come to each feeding-time with keen appetites. It will take constant observation to secure the best results in cattle-feeding. The old proverb, "The eye of the master fattens the cattle," is a true one and you should be constantly on the lookout to see that the animals are in good thrift and have good appetites. If you note that they are not thrifty, reduce the quantity of feed a meal or two.

As to the stock food. I do not believe, as a general thing, healthy animals require it. A number of experiments have demonstrated this fact where alfalfa hay of good quality is fed, and in the production of baby-beef it will pay to use the best quality of roughage. I would not advise feeding oil-meal from the standpoint of economy. Alfalfa supplies protein in sufficient quantity. It may help you to secure a little better finish to feed a little oil-meal at the latter end of the feeding-period.

As you are a beginner in cattle-feeding, it would have been better if you had made your first attempt with older cattle, as special care is required to successfully produce baby-beef.

G. C. WHEELER.

Feeds for Hogs.—Feeding Stock on Shares.

Would you oblige a reader by answering the following questions through the KANSAS FARMER?

1. Can hogs be matured successfully on Kafir-corn and Milo maize? What would be the best way to feed it? If any addition is needed to make it a good or sufficient food, what would it be?

2. In keeping one or more brood sows for a share of the increase, what would be a fair deal of that kind?

3. In keeping cows for a share of the increase, what are the usual conditions?

4. Is there any way to prevent a cow from urinating while being milked?

5. What would be a good mixture to sow, to cut green for hogs, when they can not be pastured.

C. M.

Barton County.

The question of maturing and fattening hogs on Kafir-corn is one which has been made the subject of a number of experiments here. Bulletin No. 95 on "Fattening Hogs on Drouth-Resisting Crops," gives the results of a series of seven or eight experiments in which twenty-one lots were fed Kafir-corn either as a whole or a part of the ration. In some of these trials Kafir-corn showed a value of 89 per cent of that of Indian corn. The digestible nutrients contained in Kafir-corn vary little in proportion and

quantity from those of Indian corn, being slightly less in carbohydrates and fats. Neither Indian corn nor Kafir-corn supply enough of either protein or mineral matter for the proper growth and development of swine; and in order to mature hogs on Kafir-corn it will be necessary to feed some protein feed in connection with it, such as alfalfa-pasture, skim-milk, soy-bean-meal, shorts, or tankage. Kafir-corn has been fed at this station both whole and ground, wet and dry. Wetting the whole grain at feeding-time was found to be a very successful way of feeding especially where skim-milk can be used. As a rule, we prefer to grind it and mix it with some of the protein feeds, soy-bean-meal being one of the best for this purpose. Hogs will tire of Kafir-corn rather quickly if kept on it as a steady diet, but where it is fed in connection with rather laxative protein feeds this result is not apparent. Alfalfa hay may be fed to fattening hogs to supply the required protein. In Bulletin 95, Professor Cottrell stated that Kafir-corn and skim-milk made the best gains in the series of experiments.

Regarding the share of increase to be retained for the keeping of brood sows, it would seem to me that one-half would be a fair deal for both owner of the sows and for the man feeding and caring for them; however, I have not given the subject very close attention and may be wrong in this. In the case of cows kept on shares, I believe half of the increase is the usual condition for the care and keeping.

I know of no method of curing the disagreeable habit of the milch cow mentioned. I would suggest that something be tried that will keep her attention attracted in a different channel, somewhat on the theory of the plans suggested for overcoming the balky horse.

Alfalfa would be the best plant to cut and feed to your hogs green. If it be necessary to use some annual plant, I would suggest using the Dwarf Essex rape or oats or sorghum, or a combination of two of these. These may be sown at different periods through the summer and will supply considerable green forage.

G. C. WHEELER.

Warbles.

EDITOR KANSAS FARMER:—I am in possession of a clipping cut from the KANSAS FARMER, issue of March 17, 1904, which I have preserved. I refer to the article by N. S. Mayo, pertaining to warbles or grubs in cattle.

The annual loss estimated at from 50 to 60 millions of dollars in the United States on account of grubby hides, would suggest that more than passing interest should attach to the scientific study of the matter, with a view to remedy as soon as possible.

With this object in mind, I wish to state that it is my belief after studying for years, that Mr. Mayo is mistaken in his theory. I was at one time an ox-driver, and spent the years of my early settlement handling and driving oxen. I have also handled thousands of cattle; and being a lover and a close student of nature, the result of years of study on this matter suggests the possibility of throwing some light on the subject, and correcting some of the erroneous theories concerning the same.

Mr. Mayo states that "warbles or grubs are the larval form of the ox bot-fly, or the heel-fly (*Hypoderma lineata*)," and following with a life history, states that they are "a little larger than a house-fly, and deposit their eggs late in summer in the region of the heels. Being uncomfortable, these eggs are licked off, passing into the throat or gullet, thence boring their way through the animal tissues, locating finally under the skin of the back."

I first wish to state that there is nothing in common between the heel-fly, as we know it, and the fly that lays its eggs in the backs of cattle. The scientific name, *Hypoderma lineata*, does not apply to the family Oestrinae, leach or bot- or breeze-flies, one of which family is known to us as a heel-fly. This fly appears in early spring, on hot, sunny days, and seems to work with the wind. Its course of flight is very swift, and its presence is soon noted by the wild, nervous flight of the cattle, many of which run until nearly exhausted, taking shelter in the shade or near some inanimate object. But the only sure defence seems to be mud or water, and many is the beast I have lost or released after being mired from this cause, in March, April or May.

The heel-fly seldom appears here before March, but this year on a hot day in February some were at work. They seldom bother later than May, and seem

to appear at once and leave in the same way. They may work later in the summer in other localities, but not here.

"The Hypoderma bovis Deeger, or bot-fly of the ox is black, and densely pisse. The larvae are found during the month of May and often before, and in the summer in the tumors on the backs of cattle. And when fully grown, which is generally in July, work their way out and fall to the ground." Packard (Edition 1872, Page 405.)

During the long, hot summer days driving oxen are pestered by this big black fly, often an inch in length. He is a regular gourmand, and picking out a spot where neither horn nor tail can dislodge him, commences to bore through the hide. After gorging himself with blood, he can hardly fly, but either falls or buzzes off. I have often seen a smaller fly, more slender, of the same kind, alight on the drop of blood oozing from the aperture, its action leading me to believe it deposited an egg. We have marked the spots, and a warble always springs into existence there.

The foregoing facts can be substantiated here, and I hope a closer study of the matter may obtain.

The remedy proposed by Mr. Mayo is all we have been able to use so far, but I will watch with interest the cattle that have been dipped.

CHAS. H. JACKSON.

Hodgeman County.
[This letter was referred to Dr. Mayo, now chief of the Department of Animal Industry of the Republic of Cuba, who writes as follows:]

In reply to the above letter by Mr. Jackson criticising a press bulletin published by me some two years ago, I can only say that the "theory" advanced is not mine, and that it is not a theory at all but a demonstrated fact. The only ox bot-fly found in the United States of America is the *Hypoderma lineata*, unless a new one has been found in the past two years. This fly belongs to the family Oestrinae, "bot-flies or breeze-flies" and is called the "ox bot-fly or heel-fly." It is possible that in different localities it may have a local name or some other fly may be called a "heel-fly." The authority quoted by Mr. Jackson is nearly thirty-five years behind the times. If Mr. Jackson will write his Senator or Representative in Congress, and ask for Bulletin No. 5, New Series United States Department of Agriculture, Division of Entomology, he will find some valuable information on this interesting subject and he will also find that there have been many scientific discoveries made since 1872.

I may add that the ox bot-fly has been recently introduced into this Republic from the United States, and so far as I have been able to determine, the adult fly may deposit the eggs upon the hair of cattle at any season of the year in this land of perpetual summer.

N. S. MAYO.

Chief Dept. Animal Industry, Republic of Cuba, Santiago de las Vegas.

Alfalfa for Horses and Brood Mares.

Is alfalfa hay considered good feed for young horses and brood mares? Our hay crop was short last summer and I have to buy. I had intended to buy alfalfa, but some of our people have the impression that it is not good for horses. Personally they know nothing about it for it has never been used here. I feel at liberty to ask you the question because I am one of your subscribers and know that you will give me the information. W. R. DELANEY.

Johnson County, Missouri.

There seems to be considerable prejudice against alfalfa hay as a horse-feed in some sections. This prejudice is without foundation as is evidenced by the experience of many practical feeders and horsemen. J. W. and J. C. Robison, the Percheron horse-breeders of Kansas, depend upon it almost exclusively for the production of their famous draft-horses. Henry Avery & Son of Wakefield, Kans., rely almost exclusively upon alfalfa hay and pasture for the production of their Percheron horses.

Alfalfa hay contains digestible nutrients per 100 pounds as follows: Protein, 11 pounds; carbohydrates, 39.6 pounds; ether extract, 1.2 pounds. Timothy hay contains digestible nutrients per 100 pounds as follows: Protein, 2.8 pounds; carbohydrates, 43.4 pounds; ether extract, 1.4 pounds. Wheat bran contains digestible nutrients per 100 pounds as follows: Protein, 12.2 pounds; carbohydrates, 39.2 pounds; ether extract, 2.7 pounds.

At the Utah Experiment Station the comparative merits of alfalfa hay and timothy hay has been investigated in

Clean Bones

Any kind of growth knocks the price of the horse. Usually his services are lost too, 99% of these, including Spavin, Ringbone, Curb and Spiint are cured by

Kendall's Spavin Cure Used Two Years Successfully.

West Hampton Beach, L. I., N. Y., June 22, 1905.
Dr. B. J. Kendall Co., Enosburg Falls, Vt.
Gentlemen—Please send me a copy of your "Treatise on the Horse and his Diseases." I have a stable of fine horses and have used your Kendall's Spavin Cure for two years with the very best of results, and cannot speak too highly of it.
Yours truly,
John Custer.

Price \$1; 6 for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. The great book "A Treatise on the Horse," free from drug-gists

Dr. B. J. Kendall Co.
Enosburg Falls, Vt.

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.
FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ills.

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.

Originators of Dipping Tanks, 1501-03 Bonanza St., Kansas City, Mo.

THE HAPPY HOG AT DIPPING TIME

Is happy because he is being FREED from LICE that torture and torment. August, September October, are best months to dip hogs to kill lice. DIP-OLENE, the best Hog Dip, works quickly and thoroughly. IT KILLS HOG LICE, destroys all disease germs, prevents HOG CHOLERA, saves loss, keeps your hogs healthy and growing. Every hog-raiser needs it. DIP-OLENE is easy to use; the cheapest hog insurance you can buy. Write for booklet and enough dip to make a gallon, FREE.

MARSHALL OIL CO.,
Box 13, Marshalltown, Iowa.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON, Elmdale, Kansas.

STOLL'S STAY-THERE EAR MARK.

The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send or samples. W. C. Stoll Brothers, Bob

AGENTS WANTED \$1 bottle Sarsaparilla for No. best seller; 200 percent profit. Write today for terms. F. E. Green, 115 Lake St., Chicago.

tests with work-horses and driving horses for a period extending over four years. It was found that the timothy ration was more expensive and the horses did not maintain their weight so well as on the alfalfa-hay ration. Tests were made in which alfalfa hay was also fed without grain, it being found that twenty pounds daily of alfalfa was sufficient to maintain a 1,400-pound horse where no work was performed. It required 33 pounds of alfalfa to maintain the same horse while performing hard work. It was found impracticable to maintain a horse doing very severe work on alfalfa hay alone, some grain being required.

Experiments conducted at the Wyoming Station gave similar results, much less grain being required where alfalfa hay was used in the ration.

The California Station, in discussing the results of alfalfa-hay feeding for horses, states that where alfalfa hay is available, the protein required can be supplied with much less grain than where the coarse fodder consists of the cereal hays or meadow grasses.

For the feeding of colts and growing horses I would not hesitate to recommend the feeding of good-quality alfalfa hay, giving them practically all that they will clean up. The brood mares will do well on this hay and it will be more economical than to purchase prairie hay or timothy hay, much less grain being required. G. C. WHEELER.

Cottonseed-Meal.

Will you be so kind as to send me copies of the following bulletins: No. 39, 47, 51, 53, 61, 67, 111, 118, and 124? Have you had any experience in feeding cottonseed-meal or oil-meal for fattening steers? If you have anything in regard to that, will you please send it to me and oblige?

Saline County. C. KNUDSON.

You have undoubtedly received the bulletins requested and by studying them carefully you will be able to secure considerable information on this subject.

Cottonseed-meal and oil-meal have very high values in the fattening of steers especially where alfalfa hay or clover hay are not available as roughage. These meals contain a very high percentage of digestible protein and if you are feeding corn and corn-stover, Kafir-fodder, or prairie hay as roughage, at least 10 per cent of your grain ration should be cottonseed- or oil-meal for the best gains and most economical results. Cottonseed-meal is the richer of the two and is also slightly cheaper. It may be fed to mature steers up to three pounds daily with perfect safety and even larger amounts may be fed to mature cattle for short periods. Your feed-bunks must be so arranged that no cottonseed-meal will be wasted on the ground so as to be eaten by the hogs, or you will be liable to lose some of them.

If you have alfalfa hay for roughage, I would feed little if any cottonseed-meal, alfalfa supplying the required protein more economically.

G. C. WHEELER.

Signs of the Zodiac, Have They Influence?

What influence have the signs of the zodiac on animal husbandry, particularly in relation to castration and weaning of young? C. F. C.

Mitchell County.

Answer.—If the signs of the zodiac have any influence on animal husbandry, we have never heard of it. We do not study the signs of the zodiac in connection with animal husbandry, and it is our opinion that its signs have absolutely nothing to do with the castration and weaning of young animals.

R. J. KINZER.

Feed and Care of Breeding Horse.

I have a 7-year-old stallion (Percheron) which has been out all winter with a herd. What is the cheapest and best feed? There is no alfalfa here but there is good prairie hay. Is Kafir-corn fodder good for a horse during breeding season?

How many mares can be bred during three months? What is best to keep the hair in good condition or what would be best to make him shed, and grow new hair?

Please give your advice on feed, how much to feed, breeding, in what kind of a place to keep him, and the number of mares per day. W. N. KINZER.

Stevens County.

It is never advisable to feed a breeding stallion much corn; but if this horse is in thin condition, he can be built up cheaper with corn than with any other feed. Alfalfa would be a most excellent feed to give him, but if this can not be had, oil-meal and bran can be used in connection with prairie hay to add protein to the ration and im-

prove his condition. Oil-meal will also help to shed earlier, and will make his coat look sleek and bright.

A stallion of this age, during the season, should serve from 80 to 100 mares and oftentimes he is allowed to serve even more than this. He should be given a good, roomy box-stall and have plenty of exercise. It is a common practice to give a stallion a yard or paddock in which to take exercise, but there is some danger of a horse's injuring himself, and with a valuable horse it is preferable to lead him out for exercise.

A grain ration of about 50 per cent corn, 30 per cent oats, and 20 per cent bran, with a little additional oil-meal should put the horse in good condition.

R. J. KINZER.

Hutchinson's Poland-China Sale.

We desire to call attention to the advertisement in this paper of the great Poland-China sale of James Hutchinson of Bellaire, Kansas, which he will hold at Norton, Kansas, Saturday, March 24. Breeders of this popular type of hog should remember that the greatest objection to the Poland-China is the size. For several years the leading breeders have overlooked this necessary quality in their efforts to breed something fancy. The result has been that the farmer has taken up the Duroc, not because of his admiration for him, but because he knows that the end of all is the pork-barrel, and that size is an absolute necessity.

Mr. Hutchinson is a veteran in the hog business. He has showed at all the important fairs in Nebraska for several years, and has always carried away his full share of prizes. We regret that we have not the space to give a complete list of them. If you are a breeder, look over his advertisement and note some of the great animals he has raised. His brood sows are all of the large heavy type, are good mothers and producers of large litters.

When at his farm last week, Mr. Hutchinson took us to the barn where his sows were farrowing. One had farrowed thirteen, another nine, another seven, and still another, ten pigs. We were surprised at the large litters, but he informed us that nearly all of his sows farrowed nine pigs or more. A few years ago a farmer drove to Mr. Hutchinson's place and bought a sow; some days later he came back and bought several more. From this foundation stock he started, and is now one of the coming breeders of the State. At his sale this spring his bred gilts brought an average of over sixty dollars per head.

If you want to put some new blood in your herd, or are just starting one, take this opportunity to get some of these large-boned hogs. Arrange to attend this sale, or if you are unable to attend, write your wants to C. E. Shaffer of the KANSAS FARMER and they will receive careful attention.

Ward Bros. Duroc-Jersey Sale.

Ward Bros. sale of Duroc-Jersey swine, held at Republic, Kansas, on Tuesday, March 6, was very successful, though the day was stormy and many buyers were undoubtedly prevented from attending. The Ward Bros. are among the old-time breeders of Duroc-Jersey swine, and they have the confidence of the people. The bidding was lively. The stock offered was highly-bred and in good condition and buyers were anxious to get the good things offered. Following is a complete list of purchasers at this sale which averaged \$49.36 for the entire offering. Albert Ward, Belleville, Kan.; James Logan, Frankfort, Kan.; T. Mendenhall, Fairbury, Neb.; C. E. Shaffer, Topeka; John Jones & Son, Concordia, Kan.; J. F. Lane, Guidle Rock, Neb.; A. A. Nire, Republic, Kan.; T. J. H. Flight, Republic, Kan.; Fred Collins, Belleville, Kan.; J. T. Chandler, Frankfort; Geo. Kerr, Wakefield, Kan.; Mac Wesley, Bancroft, Kan.; John Jones, Clyde, Kan.; A. Prue, Republic; James Logan, Onaga, Kan.; W. L. Vick, Junction City, Kan.; Ben Lebold, Republic, Kan.; Dick Ward, Belleville, Kan.; Henry Collins, Republic, Kan.; Emmet Price, Republic, Kan.; G. W. Soilenberger, Woodston; Marshall Bros., Burden, Kan.; H. H. Howell, Republic, Kan.

Herefords at Kansas City.

The combination sale of Hereford cattle at the Fine Stock Pavilion, Kansas City, held under the management of Secretary C. R. Thomas, last week resulted in the disposal of 87 head. The 45 bulls averaged \$104.50 and the 42 females averaged \$108.25. Good judges of Herefords pronounced these values to be at least \$25.00 too low for the quality of the animals offered.

The top price of the sale was \$400, which was paid for Steele Bros.' cow, Princess May 2d, who went to S. W. Anderson, Blakers Mills, West Virginia. Steele Bros. also sold the second highest female for which they received \$216.

The highest price paid for a bull was \$305 given for Preceptor 232358, who went to Iowa.

The list of buyers is as follows: Thomas Brown, Ottawa, Kan.; J. B. Dale, Pionsanton, Iowa; H. H. Snyder, North Branch, Kan.; C. A. Stannard, Emporia, Kan.; R. T. Pence, Napan, Mo.; J. A. McKittrick, Greenwood, Mo.; Thomas Benson, Topca, Kan.; Chas. W. Embry, Ottawa, Kan.; Joseph T. Clark, Platte City, Mo.; H. Kallor, Longton, Kan.; A. L. Weston, Colorado Springs, Colo.; John Murphy, Frankfort, Kans.; F. W. Preston, Blue Rapids, Kan.; W. L. Lacey, Kansas City; Suter Bros., Zurch, Kan.; R. M. Dobson, Independence, Kan.; H. F. Kilburn, Tyro, Kan.; L. E. Potter, Springfield, Minn.; Jones Wren, Keytesville, Mo.; A. Metzger, Lone Star, Kan.; Oscar L. Mills, Fort Smith, Ark.; Mrs. K. W. Cross, Emporia, Kan.; J. A. Larson, Evarest, Kan.; T. P. Whittonberg, Pleasant Hill, Mo.; S. J. Brock, Macon, Mo.; J. Lalviette, Florence, Kan.; L. J. Johnson, Halbut, Iowa; R. M. Hall,

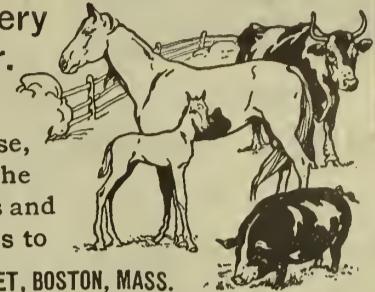
SLOAN'S LINIMENT

AND
VETERINARY REMEDIES
are a necessity to every
Farmer & Stockraiser.

MAILED FREE.

Sloan's Treatise on the Horse,
and Sloan's Advice on the
Care of Horses, Cattle, Hogs and
Poultry. Send your address to

DR. EARL S. SLOAN, 615 ALBANY STREET, BOSTON, MASS.



BLACKLEGOIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST
WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill.
No string to rot. Just a little pill to be placed
under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations.
For Sale by All Druggists. Literature Free—Write for it.

PARK, DAVIS & COMPANY.
DETROIT, MICHIGAN, U. S. A.

BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont., Montreal, Que.

Shorthorn Cattle and Poland-China Hogs

WILL BE SOLD AT

Butler, Missouri, March 23, 1906

BY

U. S. ISON, W. G. SELLON and J. L. GERE

34 Poland-Chinas 34

Twenty-two sows and gilts by Goldfinder 37913 (litter brother to Corrector 2d) and Royal Perfection 2d 36427, bred to Goldfinder and Despatcher 38736 (by Chief Perfection 2d and out of the highest priced litter sold last year and a \$1,010 dam). A choice gilt by Meddler sold open, seven boars by Goldfinder, one by Corrector 2d and two by Royal Perfection 2d. All are out of well-bred dams.

Twenty-one Shorthorn cattle, twelve bulls under a year, calves to 2 years old by Chief Elector 2d 124347 and Wild Tom 226178, a grandson of Godoy. Scotch bulls of great breeding and merit. One cow and eight heifers, nearly all by Chief Elector 2d and bred to a son of Imported Conqueror.

We invite all to attend. Send for catalogues.

U. S. ISON, M. G. SELLON & J. L. GERE

Auctioneers—Jas. W. Sparks, John D. Snyder.



Cheap Rate to California.

Californians raise gold—they don't mine much now. An easier way has been found than that! It is now obtained by farming. The alchemy of nature converts the oranges, lemons, olives, grapes, wheat, alfalfa and other products of the soil into good clothes, comfortable residences, and assuring bank accounts. 'Tis being done every day in California. Wouldn't it pay you to inquire into this? Better yet, why not go there?

Only \$25.00

From Topeka to almost all points in California and to many places in Arizona. Liberal stop-over privileges.

On sale daily, February 15 to April 7, 1906. Tourist sleepers daily on fast trains. Harvey meals.

For particulars, apply to

T. L. KING, C. P. & T. A.,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.



Warranted
to give satisfaction.

GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Scoliosis, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charged paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

LAST CALL

FOR THE

Great Combination Sale

At Kansas City, March 20-22, 1906

of all beef breeds of thoroughbred cattle, embracing noted strains of

HEREFORDS
SHORTHORNS
ABERDEEN-ANGUS
GALLOWAYS and
POLLED DURHAMS.

For information address,

H. A. FORD, Sale Mgr.,
Lawson, Mo.

FOR SALE

110 Head of Pure-bred Shorthorn Cattle

Fifty cows, principally all young and bred to Rosemary Victor 12th 186313 and Waterloo Chief 247541; also 20 bulls, 8 to 18 months old and 45 heifers the same age as the bulls. Mostly all reds. The oldest and one of the best herds in the State of Kansas. Also 40 number 1 Poland-China Sows, mostly all bred and 10 boars, 6 months old. Barred Plymouth Rock eggs for hatching, \$1 a sitting. George Channon, Hope, Kans.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants. : : : : :

A. H. DUFF,

Larned, : : : : Kansas

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co.
Wichita, Kansas

13 WEEKS FREE
Or 15 months for only \$1
The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the west. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 28 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

KANSAS FARMER COMPANY,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the Kansas Farmer three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O. Address.....

Cambridge, Neb.; Geo. B. Baker, Maryville, Mo.; Guy Jones, Bigelow, Mo.; Miss Lou Goodwin, Blue Rapids, Kan.; Oscar Milcs, Fort Smith, Ark.; Wood Roberts, Dearborn, Mo.	Boston 957, J. W. Stookeye, Gansing,	1,425
Senator J. 958, S. Ballander, Cleburne,	885	
King Debo 200, L. M. Emerson, Mammoth Boy, G. B. Mahon, Silver Lake,	700	
Captain Shanks, L. M. Emerson, John L. Sullivan, M. C. McMahill, Tabor, Iowa,	630	
JENNETS.	855	

Toddie 500, jack colt at side, R. E. Deer, Buffalo, Mo.,	\$565
Mary Jumbo 404, G. L. Cooper, Linstead, Mo.,	215
Lady Garrett 3d 369, L. M. Emerson,	155
Lady Martin 696, G. A. Thompson, Spicards, Mo.,	145
Belva 702, G. A. Thompson, Bugnolia Belle 700, Walter L. Snapp, Bellefonte, Ark.,	145
Lady Napoleon 2d 699, W. S. Snapp,	405
Black Belle 698, J. T. McKinney, Cairo, Mo.,	275
Ida Bright 403, B. Q. Moore, Linkville, Mo.,	150
Lady Compromise 2d 352, D. B. Moore,	175
Jenny Simpson 421, C. M. Meals, Green City, Mo.,	200
Baby Lee, G. A. Thompson, Baby Pluto 695, R. K. Thompson, Beasman, Mo.,	175
Daisy Lee 696, C. E. Daniels,	65
Sallie 641, R. K. Thompson,	150
Princess 2d 689, R. K. Thompson, Susan 640, J. F. McKinney,	75
Fanny Clairmont 639, G. A. Thompson,	175
Black Daisy 703, L. M. Emerson, Little Princess, H. R. Thompson, Spicksack, Mo.,	100
Black Daisy 2d, G. L. Cooper,	50
Rosanna 2d, H. R. Thompson, Belle Nero, 2d, G. A. Thompson,	35
Belle Collins, Luke Emerson,	55
Belle Collins 2d 371, C. E. Daniels, 247.50	180
Lady D. 413, Steve Smith, Tip-ton, Mo.,	110

This sale was conducted by Cols. R. L. Harriman and Jas. W. Sparks, assisted by Cols. J. J. Wells, W. D. Ross, C. J. Hieronymus, J. D. Thompson and John D. Snyder. Colonel Harriman opened the sale with a good, intelligent review of the jack and mule business of the United States and particularly of the successes of the animals from Limestone Valley. He sold the first 15 head, the first 10 averaging \$1,117.50. Colonel Sparks then took the gavel, and while the better jacks had been sold, quality considered, he held the values up strong to the close.	110
L. Harriman and Jas. W. Sparks, assisted by Cols. J. J. Wells, W. D. Ross, C. J. Hieronymus, J. D. Thompson and John D. Snyder. Colonel Harriman opened the sale with a good, intelligent review of the jack and mule business of the United States and particularly of the successes of the animals from Limestone Valley. He sold the first 15 head, the first 10 averaging \$1,117.50. Colonel Sparks then took the gavel, and while the better jacks had been sold, quality considered, he held the values up strong to the close.	110

Honeyman & Reed Poland-China Sale.

On March 2, at Madison, Kans., a number of breeders of high-class Poland-China swine combined in one of the most successful sales that has been held in Kansas for years. The consignors were W. J. Honeyman, E. E. Honeyman, E. A. Melburn, and A. J. Reed, all of Madison.

The top price was \$335, by I. E. Knox, Nardin, Okla., and J. R. Roberts, Deer Creek, Okla., for Chief's Orphan 5th (by Chief Perfection 2d); the highest price paid for a gilt was \$125, by H. L. Faulkner of Jamesport, Mo. This gilt was also by the old King Chief Perfection 2d. Both of these "tops," in fact, almost the entire offering, was bred to Mr. Honeyman's \$1,000 boar, U. C. Perfection, a State fair first prize winner and sire of first-prize pigs. The sale was a tribute to the value placed on this great boar by the breeders in this territory.

Following is a complete list of sales and buyers.

1. F. Peese, Madison,	\$126
2. (substitute)—Kno & Roberts, Nardin and Deer Creek, Okla.,	335
3. H. L. Faulkner, Jamesport, Mo.,	125
4. F. A. Dawley, Waldo,	120
5. Leon Calhoun, Potter,	100
6. H. L. Faulkner,	115
7. T. P. Sheehy, Hume, Mo.,	150
8. J. W. Myers, Galva,	75
9. L. C. Caldwell, Moran,	75
10. J. B. Myers, Canton,	50
11. H. L. Faulkner,	75
12. O. T. Calvin, Boicourt,	65
12½, F. Long, Madison,	52
14. F. Long,	56
15. D. V. Stoll, Lone Elm,	35
16. L. V. Martin, Belle Plains,	43
17. F. Long,	50
18. W. N. Messick & Son, Piedmont,	98
19. F. Long,	56
20. F. Long,	65
21. B. D. Freeman, Madison,	50
22. Dietrich & Spaulding, Richmond,	41
23. R. W. Abbott, Madison,	50
24. A. B. Huffman, Reece,	71
25. Wm. Murry, Madison Junction,	30
26. Dyck Bros., Whitewater,	78
27. Ira Allen, Strawn,	38
28. F. Long,	36
29. J. R. Young, Richards, Mo.,	50
30. J. Q. Wilson, LeRoy,	33
31. F. Long,	60
32. John Haughton, Madison,	25
32½, F. A. Dawley,	77
33. J. J. Keating, Hamilton,	29
34. F. Long,	76
35. J. W. Myers, Galva,	35
36. H. L. Faulkner,	35
37. J. Q. Wilson,	36
38. D. V. Stoll,	27
40. D. V. Stoll,	27
41. At,	50
42. J. Q. Wilson,	40
43. D. V. Stoll,	36
44. At,	33
45. At,	25

On and On Poland-Chinas.

At Richards, Mo., on March 7, Mr. J. R. Young, Missouri's noted Poland-China breeder, held another of his record-breaking bred-sow sales. This sale has not been exceeded in average price in the whole corn-belt except by the record made by Mr. Young himself in his December, 1905, sale. In these two sales, which aggregated nearly \$15,000, he disposed of 63 sows bred to the great boar On and On, at an average price of \$196.18. Nearly every State in the corn-belt was represented by buyers or mail-order bids at this sale.

The top price in this sale was \$355, paid by J. W. Honeyman, of Madison, Kans., for No. 1 in the catalogue, Lady Foster 67332, an extra fine sow by Foster's Chief Perfection 48021 and bred to On and On.

The sale was conducted by Cols. D. P. McCracken, H. O. Correll, J. W. Sparks,

HOLD UP!
and consider

THE POMMEL
BRAND SLICKER

LIKE ALL
TOWER'S
WATERPROOF
CLOTHING.

is made of the best
materials, in black or yellow
fully guaranteed, and sold by
reliable dealers everywhere.

417 STICK TO THE
SIGN OF THE FISH
TOWER'S FISH BRAND

TOWER CANADIAN COMMITTEE
TORONTO, CAN.

EL TOWER CO.
BOSTON, MASS., U.S.A.

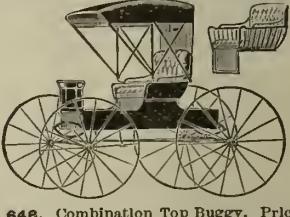


No. 516. Stanhope. Price complete, \$68.00. As good as sells for \$25 more.

33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price. We are the largest manufacturers in the world selling to the consumer exclusively. We make 200 styles of Vehicles, 65 styles of Harness. Send for large free catalog.

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, IND.



No. 646. Combination Top Buggy. Price complete with extra stick seat, \$50.50. As good as sells for \$25 more.

How to Build a Telephone Line to Your Farm

FREE We have just published several new books, which we will send free to parties interested. They tell how to proceed to build a telephone line to your farm; how to interest your neighbors; how to organize the company, and how easily and cheaply such a line can be built. One of the books describes

Stromberg-Carlson Telephones

the kind that makes rural lines successful. Write for book 129-J, "How the Telephone Helps the Farmer," and also for the book, "How to Build a Rural Telephone Line." They will furnish you valuable information you can get in no other way. Simply drop us a postal card asking for them, and for any other facts you may desire. Do it today and save delay.



Stromberg-Carlson Tel. Mfg. Co., Rochester, N. Y. Chicago, Ill.

The Best Fruit Paper

The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year, but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Every one who has a few fruit trees or a garden, should read



TRADE MARK BROTHER JONATHAN SERIES

Lafe Burger, W. D. Ross, and J. D. Snyder.

Following is a complete list of sales and buyers:

1. W. J. Honeyman, Madison	\$355.00
2. W. R. Crouther, Garden City, Mo.	202.50
3. A. Glenn, Shephardsville, Ky.	197.50
4. Ed. McDaniel, Parsons	152.50
11. John Boilin, Leavenworth	130.00
13. Linc Lukins, Disco, Ind.	300.00
5. A. Glenn	250.00
6. A. Glenn	280.00
8. T. P. Sheehey, Hume, Mo.	252.50
26. N. M. Anderson, Lathrop, Mo.	160.00
27. A. P. Wright, Valley Center	112.50
29. W. S. Babcock, Rockwell City, Iowa	100.00
15. J. A. Wilson, Milo, Mo.	120.00
16. Frank Zimmerman, Centerville	120.00
22. F. M. Scatter, Terra Haute, Ind.	225.00
7. E. E. Honeyman	290.00
25. C. E. Ogg, Auburn, Ill.	155.00
19. Walker & Carmack, Pattonsburg, Mo.	100.00
42. E. E. Axline, Oak Grove, Mo.	200.00
34. J. C. Larimer, Derby	155.00
30. John Salmon, Washington C. H., Ohio	162.50
31. Frank Zimmerman	137.50
20. Ira Garrison, Rushville, Ill.	142.50
21. James Mains, Oskaloosa	105.00
32. E. L. Jimison, Oneida, Ill.	97.50
24. C. M. Hulbert, Oakland, Neb.	100.00
4. F. Long, Madison	67.00
45. John Hart, Adrian, Mich.	90.00
9. Dr. R. W. Thomas, St. Joe, Mo.	100.00
36. W. S. Babcock, Rockwell City, Iowa	100.00
37. A. L. Ambrose, Lexington, Ill.	87.50
39. T. P. Sheehey, Hume, Mo.	77.50
14. Frank Flites, Denver, Ind.	86.00
33. E. O. Miller, Eldora, Ia.	95.00
46. J. A. Wilson, Milo, Mo.	57.50
47. Walker & Carmack	41.00

Frank Georgia's Sale.

Frank Georgia's sixth annual bourse sale was held at Mankato on February 24. Everything favored a good sale and it was one of the best ever held in that part of the State. The weather was fine, the crowd large and ready to buy, and the offering was one not to be excelled in any sale-ring. Thirty head were sold within a very short space of time, making an average of \$25 and a few cents. The buyers were chiefly among the neighboring farmers, who are acquainted with Mr. George's hogs, and appreciate their good qualities and excellent breeding.

Following is a list of the highest bidders and the prices paid for them: No. Price.

4. Jno. Stephens, Cawker City	\$26.00
8. Jno. Stephens, Cawker City	26.50
10. Jno. Stephens, Cawker City	24.00
5. Jno. Stephens, Cawker City	23.00
7. Jno. Stephens, Cawker City	24.00
21. Jno. Stephens, Cawker City	22.50
13. G. F. Hull, Iona	25.50
31. G. F. Hull	23.00
14. E. R. Bollinger, Iona	25.50
9. E. R. Bollinger	27.00
2. E. R. Bollinger	22.00
7. Ward Bros. Republic	34.00
11. J. P. Fair, Mankato	28.50
12. Thompson Bishop, Mankato	25.50
30. Thompson Bishop	41.00
22. Thompson Bishop	21.00

Some Record Prices at Avery's Percheron Sale at Manhattan, Kan., February 24, 1906.

Fifteen Percheron stallion (with six under 1 year of age), \$9225.00, making an average price of \$615; twenty-five Percheron mares (from 15 years of age to four head under 1 year), \$15,200.00, making an average for mares, \$608.40; a grand average for stallions and mares of \$611.70.

The following records were broken for Percherons at public auction in this sale:

Bosquet 40105 (46612), highest Percheron stallion, \$2825.00; Lens 40417 and Mina 31721, highest pair of Percheron mares, \$2250.00; Fanchon 42853, highest yearling filly, \$750.00; four mares in sale that averaged, each \$1000.00; the highest average on collection of Percheron mares, \$608.40.

Gossip About Stock.

H. H. Hague of Newton, Kansas, reports that in the Harvey County sale his Duroc-Jerseys made an average price of \$33.60, one sow selling for \$46. He also reports the arrival of two litters aggregating 24 pigs, 22 of which have been saved.

An event that will interest many of our readers will be the Janes Stock Farm sale of 34 trotting-bred horses and Standard-bred mares to be held at the State Fair grounds, Topeka, Kans., on Tuesday, April 3, 1906. The horses will be shown at the State Fair grounds prior to the sale. A great many of the horses in the offering are sired by General Evans 13166, 2:26%. For information and catalogue address C. N. Janes, Willard, Kans.

E. E. Axline, the big Poland-China breeder at Oak Grove, Mo., and Dr. O. L. Kerr, the breeder of the Champion O. L. C.'s, Independence, Mo., will hold a sale of these two breeds at Independence, Mo., on April 5, 1906. There will be 30 head of each breed in the sale. Mr. Axline has selected some excellent animals for this sale and requests breeders and all who contemplate purchasing to send for a catalogue which is free for the asking. A cordial invitation is extended to all who are interested in either breed to attend this sale.

Any one needing a farm should read the advertisement of the Norton Land Company in this paper. They desire especially to call attention to the last two farms in the list. If you want something worth the money, write them at once. These farms are in Norton County, which has 30,000 acres of alfalfa and where every farmer is prosperous. One bank alone at Norton has over \$450,000 in deposits which belongs to the farmers. It will pay you to write them and mention THE KANSAS FARMER.

R. F. Norton & Son, owners of the Orchard Hill herd of Duroc-Jerseys write as follows: Can any one beat it?

"I noticed the mention of a big pig raised by Taylor and Wolff in your paper of March 8. We have one sired by Tip Top Notch Champion boar at the World's Fair at St. Louis which we think is making a good gain. For the seven days ending February 24, he gained 17 pounds. He next week ending March 3, he gained 16 pounds. Thus making 33 pounds actual growth (not fat), in 14 days. He is now six months old and weighs 175 pounds beside losing three weeks on account of having been hurt in shipping."

We recently visited the stock farm of Chas. Morrison & Son at Phillipsburg, which is one of the best kept stock farms in Kansas. Mr. Morrison is a breeder of Red Polls and Poland-China hogs. His cattle are among the best in the State and he has built up a reputation among breeders that enables him to dispose of all his young stuff as fast as he can produce it. Mr. Morrison carries a yearly card with the KANSAS FARMER and says it has brought him excellent results. Of the large number of bulls he raised last year he only has four or five left. If you need anything of his breeding it will pay you to write him.

The Diamond Creek Stock Farm, owned by J. W. Creech of Herington, will have a sale of 50 head of Standard-bred horses at Herington, Kans., on Monday, March 26, 1906. The offering consists of brood mares, young stallions, geldings and fillies ranging from 1 to 3 years old. The leading farm stallion is Escobar 2:13 1/4. He is a grandly-bred sire and his get show splendid style and finish. Catalogues may now be had on request and contains some special attractions including Angelbar, lot 4. Matched teams, lots 6, 8, 14, and 16, comprise two matched teams that will interest discriminating buyers.

G. M. Scott, Rea, Mo., held a very successful jack sale at Savannah, Mo., the 8. He sold jacks and mules for a total of \$18,057.50, a pretty good day's business in the disposition of the produce of a part of the Quiet Glenn Farm. The 21 jacks sold for an average of \$682.56; Two sold for \$1,200 each, and another for \$1,000; half the offering were 2-year-olds. Kansas got some of the best, No. 5 of the offering going to Henry Loeb, Baxter, at \$1200. A. D. Sanders, of Parnell, Kansas, was another purchaser; others were W. C. White, T. G. Sanig, Yorktown, Ia.; G. E. Hanks, Nebraska, Clay, Neb.; Oliver Ott, Allen, Mo.; W. C. Martin, Pleasant Hill, Mo.; as Millen, King City, Mo.; Ollie Iverson, Blaken, Neb.; W. L. Nixon, Pleasant Hill, Mo.; W. J. Rhodes, Lee's Summit, Mo.; W. R. Hillman, Hebron, Neb.; Dysart Bros., Barnard, Mo.; Henry Ferguson, Westmoreland, Kan.; Allen Cunningham, Clyde, Mo., and Nels F. Pearson, Stanton, Ia. The sale was conducted by Jas. W. Sparks, and William Brooks, and is considered one of the very successful sales of the season.

U. S. Ison, W. G. Sellon and J. L. Gere will hold a sale of Poland-China hogs and Shorthorn cattle at Butler, Mo., March 23. These gentlemen are selling an excellent lot of stock. Mr. Ison sells one cow and three young bulls, twenty-nine head of hogs, twenty-three sows and gilts, including one by Meddler, one by Corrector 2d, others by Goldfinder, a litter brother to Corrector Goldfinder and Royal Perfection. He also sells five hoars, good ones of the same breeding. Sows and gilts are bred to Goldfinder or Despatcher, one of the litter that sold for \$2,250 last fall, and whose dam recently sold for \$1,010. A litter by this great pig should be an attraction in any herd in the land. Mr. Sellon sells nine lusty young bulls of serviceable age. Most of them are old enough for range use and eight 2-year-old helpers. These are all by the Scotch bull, Chief Elector 2d, and bred to a son of Imp. Conqueror, one of the best Scotch-topped American families, nearly all Young Marys. Mr. Gere sells five fall boar pigs by Goldfinder, four of them are out of a Mischief Maker dam. All in all the breeding and individuality of the offering gotten together by these gentlemen should attract good breeders and farmers wishing to buy the best foundation stock. It is not expected that it will be a high-priced offering, so we think it a good place to go to get good Poland-Chinas and Shorthorns. If you can not attend, send bids to auctioneers, Sparks and Snyder.

The Shorthorn sale of E. D. Ludwig, held at Sabetha last week, served to attract a large crowd of buyers in search of his good cattle. Owing to the fact that the amphitheater containing the crowd of buyers fell with a crash almost immediately after the opening of the sale, and this was followed by a heavy windstorm which practically destroyed the sale-tent, the buyers were more or less demoralized and the prices realized were much below what they might otherwise have been. Some of the animals in the sale were consigned by the local breeders. The 26 head sold by Mr. Ludwig brought \$2,872.50, an average of \$110.48. The total offering of 39 head made an average of \$100.40. The top was \$255, paid by J. O. Kimmel, of Sabetha, Kans., for the herd bull, Harmont Knight 148795. The young bull, Scotchman 245103, was well sold, going at \$225 to J. P. Lahr, Sabetha, Kans. A. B. Simms of Troy, Kans., paid the next higher price, buying Sir Victor 253142 for \$140. J. O. Hunt, of Marysville, Kans., topped the female section, paying \$130 for the Cowslip cow, lot 6. Mr. Hunt and Everett Hayes bought several of the best cows and helpers. Among other good buyers were: William Pechi, Morrill, Kans.; T. A. Isenbise, Morrill; J. A. Windle, Falls City, Neb.; John Laseumbe, Circleville, Kans.; Rufus Miller, Morrill, Kans.; A. R. Lanning, Sabetha, Kans.; A. B. Van Dyke, Sabetha; M. Bigley, Sabetha; Roy Isenbise, Morrill; R. A. Smith, Summerfield, Kans.; Ed. McCoy, Sabetha; John Draney, Sabetha; William Davis, Morrill; T. K. and George Masterson, Sabetha; W. N. Ord, Sabetha; J. C. Strom, Sabetha; Chris Coffey, Ax-

It Will Pay You To Investigate

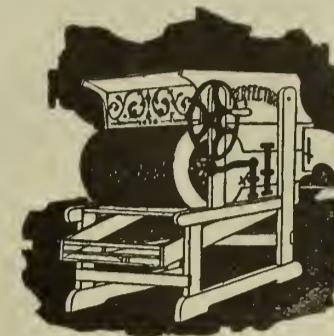
the merits of the

"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.



This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305, Kansas Avenue, Topeka, Ks.

The Southwest Limited

Was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts. If you doubt the first fact compare the service of today with that before the Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago via the

Chicago, Milwaukee & St. Paul Railway

will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p.m.: Grand Avenue 6.07 p.m. Arrives Union Station, Chicago, 8.20 a.m.

G. L. COBB

Southwestern Passenger Agent

Tickets, 907 Main Street

KANSAS CITY

The Plow For You

Because it is built to do the most work, in the least time and with the least labor on the part of man and team. Light draft because no land side or bottom pressure. Weight of plow and load carried on the wheels. Wonderful tool lift that makes it easy to throw plow high when it is in the furrow. Spring lock keeps the plow steady. There is

Fuller & Johnson Quality

all the way through. Extra hardened highly polished steel mould boards that scour in any soil. Slanted and riveted spokes that are easily replaced in case of accident. Flexible land wheel for uneven surface so that furrow is always uniform.

THE BOOK FOR YOU: Money Making Methods In Soil Cultivation

Is just what every farmer needs to help him decide how to treat his particular land to get the best results and what style of implement is best suited to certain kinds of soil and work. It is the only thing of this kind published and it's a gem. FREE FOR THE ASKING. Address

FULLER & JOHNSON MFG. CO.,

110 Dickinson Street, MADISON, WISCONSIN.

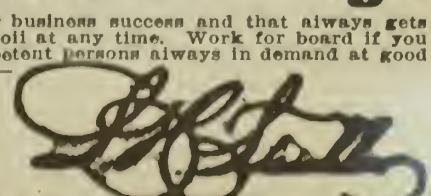


Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enrol at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship



TOPEKA BUSINESS COLLEGE, Topeka, Kans.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary
Kansas State Grange, to whom all correspondence
for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master..... N. J. Bachelder, Concord, N. H.
Lecturer..... Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary ... C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... A. P. Reardon, McLouth
Lecturer..... Ole Hibner, Olathe
Stewart..... R. C. Post, Spring Hill
Assistant Stewart..... Frank Wizell Ochiltree
Chaplain..... Mrs. M. J. Ramage, Arkansas City
Treasurer..... Wm. Henry Olathe
Secretary..... George Black, Olathe
Gatekeeper..... J. H. Smith, Lone Elm
Clerk..... Mrs. M. L. Allison, Lyndon
Pomona..... Mrs. S. M. Phinney, McLouth
Flora..... Mrs. S. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman..... Topeka, Station A
E. W. Westgate..... Manhattan
George Black, Secretary..... Olathe
Henry Rhoades..... Gardner
J. C. Lovett..... Bucyrus

STATE ORGANIZER.

W. B. Obryhim..... Overbrook

MASTERS' ANNUAL ADDRESS.

**Words of Aaron Jones on Retiring From
the Position of Worthy Master of
the National Grange.**

We have assembled in the thirty-ninth annual session of the National Grange representing the agricultural industry of the country, not only to discuss its condition and to devise ways and means of advancing the interests of this great basic industry and thereby promote the welfare of the tillers of the soil, but in a broader sense to advance the interests of the American people, for whatever promotes the welfare of agriculture promotes the welfare of every other industry. It is peculiarly appropriate to come together with this laudable ambition within the borders of the productive State of New Jersey and upon the shores of the broad Atlantic, prolific with commerce made possible by the products of American farms. The conditions surrounding our meeting place should inspire a comprehensive view of the general situation without detracting in the least degree from the well-established reputation of the Grange for loyalty to the industry it represents.

CONDITION OF THE ORDER.

Since our meeting one year ago upon the Pacific Slope, there has been constant and substantial growth of the organization in membership and activity in all sections of the country. Many dormant granges have been revived, new granges established and over 60,000 added to the membership. This growth has not been confined to any locality but is observed in the States on the Pacific Coast, in the great agricultural States of the Middle West, in the South and in the Central and Eastern parts of the country. The progress of the organization in social and mental development among the rural people, and in influence upon public affairs, can be cited in every State where the organization is established. A recital of the victories won in promoting culture and refinement, intelligence and thrift, exemplary citizenship and happy homes, and in securing wholesome legislation and the fearless enforcement of laws, would reveal an influence exerted without a precedent by the farmers of the country in the battle for social advancement and that justice and equality vouchsafed to all by the constitution of our country. I congratulate you upon the present condition of the order and its favorable position for effective work in the future.

EDUCATION.

The corner-stone of our organization is education, affording its members the opportunity, through cooperative effort to study the principles of advanced agriculture, including the relation of the elements of the atmosphere to the elements of the soil; the relation of elements of food to the requirements of plant and animal life; the combating of plant diseases and the suppression of injurious insects and fungus growth; as well as the opportunity to study domestic science, political economy and that form of politics known as the science of government. The improvement of rural schools, the introduction of the principles of agriculture in the public school curriculum, the policies of agricultural colleges, and the investigations of experiment stations are educational matters that come with the scope of our work. The ritual ceremonies, which for sublimity and pathos are unexcelled by the ritual ceremonies of any organization, are educational in their

effect upon all who participate in them. These matters contribute to mental development after school days are past, and supplement the cause of public education with a system of such practical utility as has been unknown in the history of the world. As an organization we advocate that form of public education that teaches the boys and girls how to do things as well as why things are done. We reiterate that clause in our Declaration of Purposes, made in 1874, which says, "We especially advocate for our agricultural and industrial colleges, that practical agriculture, domestic science and all the arts which adorn the home be taught in their courses of study, and so far as is practicable we advocate instruction as a means of mental development in our public school system."

AGRICULTURE.

The present season has been favorable for crop-production and producers of nearly all kinds of crops have secured abundant harvests. The fruit and grain crops of the Pacific Coast, the corn and wheat crops of the Middle West, the cotton crop of the South and the dairy feeding crops of the Eastern States have yielded abundantly, and the barns and storehouses are bursting with plenty. Business prosperity is unprecedented and on every hand the transportation, manufacturing and commercial affairs through the operations necessary in transferring those crops to the consumers, and in furnishing those engaged in growing and handling them with supplies is being carried on. Agriculture being the only industry that produces things, is the only industry that can increase the real wealth of the country. Manufacturing may change the form, transportation the location, and trade the ownership of property, and each industry may afford profitable employment for a vast number of people; but it is agriculture that furnishes the base of these operations by bringing into existence real property that did not exist before. In view of these facts, agriculture is entitled to greater consideration than any other industry in fixing the policies and enacting the laws of the Nation, and to secure a recognition of this principle is one of the prime objects of organization among farmers.

AGRICULTURE A PROFESSION.

At no time in the past has agriculture been in a position to be classed as a profession so much as at the present time. The old-time practices which might be appropriately termed muscle farming, have given way to modern methods, which require mental activity as the chief requisite. Farm machinery has taken the place of manual labor and nitrogen-gathering plants in an intelligent rotation of crops have partially superseded dependence upon natural soil fertility or the application of elements of plant-food to the soil. The development of desirable characteristics by intelligent breeding of animals and consequent elimination of undesirable characteristics, requires knowledge and skill in animal industry unknown even to scientists a generation ago. The protection of fruit and vegetable crops from injurious insects by the application of poisonous substances, and making available plant-food in the soil through the admission of air and the conservation of moisture, have come into general use in recent years and are as essential to profitable agriculture as planting the seed or harvesting the crop. These and other practices have become an absolute necessity for successful husbandry, and require an intimate knowledge of the science of agriculture. This may be obtained at home through courses of study of agricultural text books, or by close observation of the methods of those who have acquired the knowledge through one or more of these various sources. Even the extensive cereal producers of the great prairie States, and the extensive livestock growers of the more remote sections of the country, are finding that an intimate knowledge of the principles underlying their respective branches of agriculture is essential to success. Attention to this matter is raising the occupation of the farmer from one of muscular exertion without mental discipline, to an occupation requiring mental exertion of the most elevating character, and is placing the tillers of the soil in the class from which leaders in public matters requiring mental development may be selected. It is changing farming from drudgery to pleasure, and the farmer from a "hewer of wood and drawer of water" to the peer of professional men in mental capacity and equipment. It causes him thereby to respect his occupation more, and causes people engaged in other occupations to place a higher estimate upon him as a man and a citizen.

THE PRESS.

The rapidity with which the agricultural press has advanced in recent years, both in circulation and efficiency, is evidence of the enterprise of publishers in keeping pace with the general agricultural progress and of the increased interest among the people in reading agricultural matter. Even a more general interest in such publications as now exists would be of advantage to intelligent and successful farming. Frequent and regular reading of good agricultural papers by farmers with sufficient discrimination to determine what is reliable and applicable to their soil and conditions, and changing their methods in accordance therewith, is a matter of the greatest importance and may render valuable assistance to them. Many of these papers conduct grange departments in which articles of special interest to members of the organization regularly appear, and in the aggregate give wide publicity to grange matters. These departments are mutually advantageous to the publisher of the paper and to the grange readers. The Quarterly Grange Bulletin, issued by the lecturer of the National Grange, under the direction of the executive committee, has now been issued ten years and has regularly carried the suggestions of the National Grange to the members of every grange in the country. This publication is unifying, stimulating and directing thought and discussion along practicable and profitable lines, and was, and is of very great value to the order and the people in developing a better type of citizenship. I recommend that this publication be continued and issued weekly. Many of the agricultural papers have quoted largely from its columns, and one, the American Grange Bulletin and Scientific Farmer, has published it in full, and I am advised has sent sample copies to every grange in the United States. As Master of the National Grange, I desire to extend the grateful thanks of the order to all papers that have assisted in disseminating grange thought.

AUTOMOBILES.

No innovation in modes of travel has caused more general comment, both favorable and otherwise, than the appearance of automobiles upon country roads and the consequent disturbance of travel upon those roads. Accidents of the most shocking nature have been of common occurrence as reported by the press, and an innumerable array of minor disasters on account of fright of horses from these machines, might be presented. In fact, in some sections of the country, travel upon country roads has been reduced to the driving absolutely necessary for the conduct of business, cutting out all pleasure driving because of fear of accidents. There is no doubt of the right of autoists to legitimate use of the highways, but that use should be regulated by wise laws vigorously enforced and the penalties for their violation should be sufficiently severe to serve as an effectual warning against violations by others. The reputable autoists owe it to themselves to join with the people in this movement against the reckless for the protection of life and property, and their own reputation as honorable, law-abiding citizens. It would be well to have uniformity in such laws in the various States, and a uniform policy for their vigorous enforcement; for the lives of our people are of more importance than the pleasure of a few people from rapid and reckless riding.

AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

By common consent the grange is the representative of the farming class in discussing the work of agricultural colleges and experiment stations, as well as in securing appropriations for their support. The recent rapid development of an agricultural science and the awakened public interest in agricultural education renders it of the utmost importance that the colleges and the farmers have a true conception of the aid that each can render the other. If the chief aim of an agricultural college is to educate out of agriculture into other industries, it will render but little aid to agriculture; if the farmers fail to comprehend the advantages of an agricultural education, they will secure but little benefit for their industry from these colleges. With a just appreciation of the fact on the part of the managers of these institutions that the primary object in their establishment was the advancement of agriculture, and on part of the farmers that they should avail themselves of the opportunity afforded by these institutions for educating their boys or other boys in this great science, there will be such an impetus given to intelligent and profitable agriculture as can come from no other

(Continued on page 228.)



**DEAR TO
THE HEART
OF EVERY BOY**

A STEVENS FIREARM

The "Little Krag," \$5,
is a little brother to
the one our
soldiers
use.

Stevens Catalogue Free

Illustrates and describes our entire line of rifles, shotguns, pistols. Send 4 cents in stamps for postage, and we will mail this 140-page book to you free.

Insist on Stevens Firearms. If your dealer can't supply you, we ship, express prepaid.

J. STEVENS ARMS AND TOOL CO.
125 High Street
Chicopee Falls, Mass., U.S.A.

EYE SIGHT RESTORED



FREE

80 PAGE BOOK

Tells How to Cure Yourself of Blindness, Falling Sight, Cataracts, Granulated Lids, Red, Sore or Weak Eyes, Pannus, Scums, Wild Hairs, Ulcers or Scars on Eyes and all other eye diseases at your own home, by a safe and certain method and at very little expense.

BOOK TELLS ALL ABOUT EYE DISEASES

and how to cure them with the Absorption Treatment. Describes all the various forms, shows colored pictures of how various diseases affect the eyes.

Book contains eye testing chart for Cataracts, as well as for any weakness or disease.

Write for one of these books today, I will gladly send it to you free of charge.

DR. W. O. COFFEE, 872 Century Bldg., Des Moines, Ia.

Paint Without Oil

Remarkable Discovery that Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package and a Big Book Telling All About Paints and Paint-Making are Mailed Free to Everybody Who Writes.

A. L. Rice, a prominent manufacturer of Adams N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powdorpaint. It comes to you a dry powder and all that is required is cold water to make a paint weatherproof, fireproof and as durable as oil paint. It adheres to any surface, wood, stone or brick, it spreads and looks like oil paint and yet only costs one-fourth as much. For many purposes it is much better than oil paint and is indispensable to every property owner.

Write to Mr. A. L. Rice, 392 North St., Adams, N. Y., and he will send you a free trial of his new discovery, together with color cards and his valuable book on Painting, all free. This book lets you into all the secrets of paint-making, exposes fake paints, tells you what kind of paint to use for different purposes and shows you how you can save and make a good many dollars. Write today and the book and free trial of Paint will be sent you by return mail.

60 DAYS FREE

WE WILL SEND any windmill we make to

any address to be given
60 DAYS FREE while you
can have with your
mails that others sell at
two to four times our
price, and if you don't
find our Kenwood runs
easier, has more power, requires less
attention, easier to set up and handle
(any farmer can easily set it up),
pumps more water, runs in lighter
wind, if you don't find it stronger,
handsomer, better made and worth
more than any other windmill made, return it to us
at our expense and you are not out one cent.

\$11.12 buys our new 1906 Kenwood all steel,

anyone can set up in a few hours. \$12.08 buys

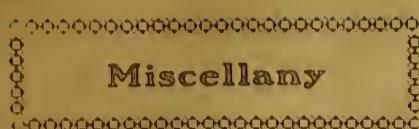
our latest 1906 style, best and strongest all steel
Kenwood. Cut this out and send to us, or on a
postcard or letter to us say, "Send me your Free
Windmill Offer," and you will receive by return mail,

our latest big Special Windmill Catalogue,
showing a great variety of pumping and power wind-
mills in all sizes, a great variety of steel towers, tower
tanks, etc. you will get our Free Trial Offers, the most
wonderful windmill proposition ever heard of.

**THIS BIG 6-FOOT FULL SIZE
COUCH FREE** if you let us send
you a windmill or other goods.
You will also get this great Free
Couch Offer if you will write for our Free Windmill
Offer, SEARS, ROEBUCK & CO., CHICAGO

DETECTIVES

Shrewd men wanted in every community, to act under instructions; previous experience not necessary. Send for free book of particulars. Grauman's Detective Bureau, Cincinnati, Ohio



Miscellany

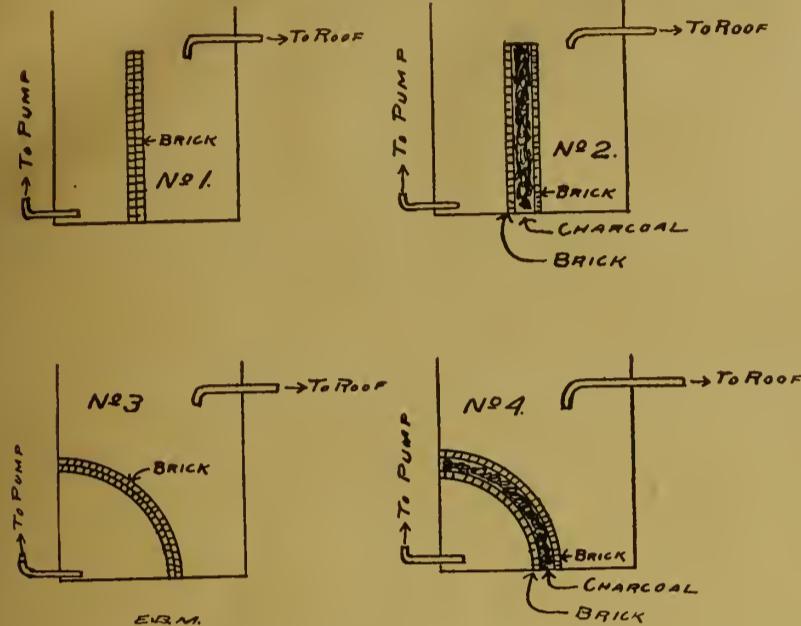
Filters for Cisterns.

EDITOR KANSAS FARMER:—I enclose four sketches showing methods of filtering cisterns. The method shown in No. 1 is the simplest and cheapest and consists of a single or double wall running through the center of the cistern, and built up of porous brick. No. 2

heading, "Remarks on Work With Insects," the reader is referred to one of the bulletins just mentioned, "Common Injurious Insects of Kansas."

HOUSE-FLIES AS CARRIERS OF DISEASE GERMS.

With the approach of warm weather, house-flies will appear again, and the danger arising from their agency in conveying disease germs increases as they multiply. Wherever the accumulated filth of horse-stables is allowed to remain from winter, especially in thickly populated communities as cities



shows a double brick wall with a space of 2 inches to 6 inches between. This space is filled with clean charcoal. This is a more expensive method than the first one, but the water will be purified to a far greater extent. Both of these methods have the objection that the filtered side as well as the unfiltered, is open at the top, thus admitting more or less dirt.

Nos. 3 and 4 show methods by which the filtered part is entirely enclosed. They differ from each other in that No. 4 has a layer of charcoal between the two brick walls which No. 3 has not. No. 4 is the best method of filtering a cistern. If the filtered portion is thoroughly cleaned out before the arch is completely closed, there need be no trouble whatever with dirty water. The water should be supplied near the top of the unfiltered portion and drawn from the cistern near the bottom of the filtered portion, as indicated in the cuts.

E. B. MCCORMICK,
Mechanical Engineering Department,
Kansas State Agricultural College.

Timely Remarks About Insects and Nature Study for Spring Months.

ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

The following letter to the KANSAS FARMER was referred to me for answer:

"Do you know of any remedy to exterminate grasshoppers, either before or after they are hatched? I was told a remedy was given by a reader of your paper, in some of the recent issues, but if so I failed to see it. Please answer in the columns of your paper. From one who wishes to know."

J. H. SHULL."

Rawlins County.

A review of the methods of combating locusts was presented in my article entitled "Remarks About Injurious Grasshoppers," which appeared in the KANSAS FARMER of September 22, 1904.

The editors can not always supply back numbers, but further information can be readily obtained in the form of insect bulletins which are offered for free distribution by Prof. F. H. Snow, of the Department of Systematic Entomology, University of Kansas, Lawrence, to any applicant who encloses stamps for the required postage. The three bulletins which particularly treat of grasshoppers are, "Common Injurious Insects of Kansas" (postage 5 cents); "The More Destructive Grasshoppers of Kansas" (postage 1 cent); and "Alfalfa, Grasshoppers, Bees—Their Relationship" (postage 7 cents).

NOTICE OF THE SPRING CANKER MOTH.

A warning that the time has come for the spring canker moth to appear was observed February 19, at night, when the first moth of the season was noticed. The enforcement of precautions is now advisable, both for shade trees and orchards. As a valuable source of information in regard to this pest, other than my notes about it which were published in the KANSAS FARMER of April 20, 1905, under the

and towns, every spot of this kind becomes a menace to the public health in affording breeding-places for the flies. Hence the importance of cleaning such premises at an early date is apparent. A very pointed reference bearing on the case attracted my eye in reading "The Terrible Horse," an article by Rene Bache in The Saturday Evening Post of November 25, 1905; the portion quoted here was headed "A Purveyor of Disease."

"A discussion of dangers attributable to horses would be incomplete without some reference to the fact that they are responsible for the existence of the multitudes of house-flies which, apart from the discomfort they cause in summer, are known to be carriers of disease germs. Every stable in warm weather is a fly factory, in active operation night and day. It is safe to predict that within a few years—say a quarter of a century hence at furthest—this nuisance, which continues to exist simply because we have not taken the small amount of trouble necessary to suppress it, will have been practically done away with by the adoption of preventative measures.

"When the annual fly plague ceases to recur, a serious menace to the health of the community—for which we ourselves, and not the poor horse, are really to blame—will have been removed."

INDUCEMENTS FOR NATURE STUDY IN SPRING.

In springtime Nature bestirs herself, and the reviving of life in the trees, plants and wild creatures especially attracts the eager interest of children. No better time is offered for connected reading-courses than when Nature's own object lessons are being most forcibly demonstrated. Two little books that are just adapted for the instruction of the child are called "Plant Life" and "Animal Life," both being written by Florence Bass and published by D. C. Heath & Co., Boston, Mass. Their cost is trifling, the first being priced at 25 cents, the other at 35 cents. They are printed in large, readable type, besides containing numerous pictures in which children delight, and are bound in board covers. The importance of nature study has required the preparation of special books for children, and these two are written in such simple language as to be readily understood by the child of the second and third school grades. What investment to greater advantage can be made for a child than for such aids that train the juvenile mind for accurate perception concerning how and what to observe to the best purposes?

In regard to insect study, since insects are our most abundant forms of life, young people and particularly teachers will find the work by Hyatt and Arms of "Insects," also published by the same company, price \$1.25, as a compact, yet efficient guide, which, itself, is a series of replies to questions that are apt to be asked concerning the structure and habits of insects in all their orders.

DO IT YOURSELF



An attractive feature about Amatite Ready Roofing is that it is really ready to lay when it reaches you.

In many so-called Ready Roofings the purchaser must get nails, cement, and other little articles before he can really begin to lay his "ready roofing." But with Amatite these little extras are supplied free.

Each roll contains nails and every other necessity for putting Amatite properly on the roof. The roofing is absolutely ready to lay. Prepare your roof, then lay Amatite—you will not need to send to the painter or carpenter or blacksmith or hardware store for this, that or the other thing.

Any one can put Amatite on the roof. Just follow the simple directions and you'll have a water-tight, weather-proof roof, that rain, wind, snow or hail can not harm. You can then cut

the "repair item" out of your yearly expenses, for Amatite will require no repairs or painting for years after it has been nailed on.

The protective mineral surface is the feature which makes painting and coating unnecessary, and gives to Amatite a longer life than that of any other ready roofing.

Send for a sample. Test it—read up about it in our booklet. You may not need a new roof now, but get acquainted with the subject, and when the time comes that new roofs are required, you can order Amatite without delay.

Address the



Barrett Manufacturing Company,
New York, Chicago, Cleveland,
Boston, Allegheny, St. Louis, Minneapolis,
Philadelphia, New Orleans, Kansas City.

A POWER
on Every
Farm

THERE should be a power of some kind on every farm.

It saves labor, time and money, and increases the earning capacity of the farm.

It will work the raw material of the farm into a finished product.

All up-to-date farmers agree that the modern gasoline engine is the best farm power.

Our I. H. C. gasoline engine is the **best gasoline engine**.

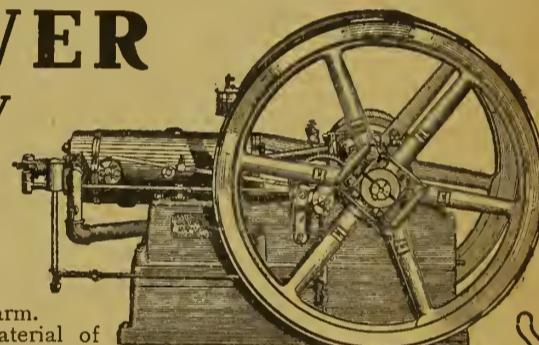
It is strong, durable, long lived and is of full rated, actual (not estimated) horse power.

It is easy to operate and is easily kept in working order.

It develops the maximum of power with the minimum of fuel.

Specially adapted to cutting dry fodder and ensilage, husking, shredding and shelling corn; threshing

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, ILL.



and grinding feed; sawing wood, separating cream, pumping water, etc.

Indeed there is no service required of a power that will not be performed most satisfactorily by this engine.

I. H. C. gasoline engines are made in the following styles and sizes:

Vertical—2, 3 @ 5 Horse Power;

Horizontal—(Portable and Stationary), 4, 6, 8, 10, 12 @ 15 Horse Power.

If you are not intending to purchase an engine now, you may want one in the future and really ought to know more about them.

Call on our Local Agent, let him show you the engines and supply you with catalog, or write for further information. Do it now.

Correct Fence Construction

CORRECT construction is just as important in fence as it is in a house, a bridge, or a wagon. With faulty construction, the best and the heaviest materials avail you nothing. Advance Fence is so constructed as to utilize *all* the strength of the material used. The stay wire is continuous, without an end for many rods. Manufacturers who use cut stays waste about half the strength of the wire. That's bad construction.

Galvanizing. We have recently made special arrangements with a large manufacturer of wire to have our representative always on the ground to see to the proper galvanizing of our wire and to reject all wire not properly galvanized. This insures the long life of Advance Fence.

We sell direct from factory and thereby cut out all unnecessary handling and profits of go-betweens. This makes quite a saving.

Thirty Days Free Trial. Place your order with us for what fence you need. After thirty days, if it does not suit you, return it to us at our expense and get your money back. That's fair.

We Prepay Freight and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices

ADVANCE FENCE CO.
3772 Old Street, Peoria, Ill.



GET THE BEST—TOWER'S SURFACE CULTIVATORS

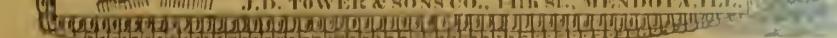
for corn, kaili-corn, cotton, tobacco, sorghum, & potatoes, beets and other vegetables.

THREE SIZES: for two rows or one row—three horses, two horses or one horse.

"We got 49,500 bushels more corn from our 3,300 acres than ever before under best conditions. Would not attempt to farm without Tower's Cultivators. IROQUOIS CANNING CO., Onarga, Ill."

Free Trials on Surface Cultivation. Introductory prices where we have no agents.

J. D. TOWER & SONS CO., 1415 S. MENDOTA, ILL.



Home Departments

CONDUCTED BY RUTH COWGILL.

Towser Shan't Be Tied To-Night.

(Reprinted by Request.)

Slow the Kansas sun was setting
O'er the wheat fields far away,
Streaking all the air with cobwebs,
At the close of one hot day.
And its last rays kissed the foreheads
Of a man and maiden fair,
He with whiskers short and frowsy,
She with red and glist'ning hair.
He with shut jaw stern and silent,
She with lips all cold and white,
Struggled to keep back the murmur,
"Towser must be tied to-night."

"Papa," slowly spoke the maiden,
"I am almost seventeen,
And I've got a real lover,
Though he's rather young and green.
But he has a horse and buggy,
And a cow and thirty hens.
Boys that start out poor, dear papa,
Make the best of honest men.
But if Towser sees and bites him,
Fills his heart with sudden fright,
He will never come again, pa;
"Towser must be tied to-night."

"Daughter," firmly spoke the farmer,
Every word pierced her young heart
Like a carving knife through chicken
As it hunts a tender part.
"I've a patch of early melons,
Two of them are ripe to-day,
Towser must be loose to watch them,
Or they'll all be stole away.
I have hoed them late and early,
In dim morn and evening light.
Now they're grown I must not lose
them,
Towser'll not be tied to-night."

Then the old man ambled forward,
Opened wide the kennel door,
Towser bounded forth to meet him,
As he oft had done before,
And the farmer stooped and loosed him,
From the dog-chain short and stout,
To himself he softly chuckled,
"Bessie's feller must look out."
But the maiden at the window
Saw the cruel teeth show white,
An undertone she murmured,
"Towser must be tied to-night."

Then the maiden's brow grew thought-
ful,
And her breath came short and thick,
Till she spied the fam'ly clothes line,
And she whispered, "That's the
trick!"

From the kitchen door she glided
With a plate of meat and bread,
Towser wagged his tail in greeting,
Knowing well he would be fed.
In his well-worn leather collar
Tied she then the clothes line tight,
All the time her white lips saying,
"Towser must be tied to-night."

"There, old doggie," spoke the maiden,
"You can watch the melon-patch,
But the front gate's free and open,
When John Henry lifts the latch,
For the clothes line tight is fastened
To the harvest apple tree.
You can run and watch the melons,
But the front gate you can't see.."
Then her glad ears hear a buggy,
And her eyes grow big and bright,
While her young heart says in glad-
ness,
"Towser, dog, is tied to-night."

Up the path the young man saunters,
With his eye and cheek aglow,
For he loves the red-haired maiden,
And he aims to tell her so.
Bessie's roughish little brothers,
In a fit of boyish glee,
Had untied the slender clother-line
From the harvest apple tree.
Then old Towser hears the footsteps,
Raised his bristles fixed for fight,
"Bark away," the maiden whispers,
"Towser, you are tied to-night."

Then old Towser bounded forward,
Passed the open kitchen door.
Bessie screamed and quickly followed,
But John Henry's gone before.
Down the path he speeds most swiftly,
For old Towser sets the pace,
And the maiden close behind them
Shows them she is in the race.
Then the clothes line—can she get it?
And her eyes grow big and bright,
And she springs and grasps it firmly,
"Towser shall be tied to-night."

Oftentimes a little minute
Forms the destiny of men.
You can change the fate of nations
By the stroke of one small pen.
Towser made one last long effort,
Caught John Henry by his pants,
But John Henry kept on running.
For he thought that his last chance,
But the maiden held on firmly.
And the rope was drawn up tight,
But old Towser kept the garments,
For he was not tied to-night.

Then the father hears the racket,
With long stride he soon is there,
Where John Henry and the maiden
Crouching for the worst prepare.
At his feet John tells his story.
Shows his clothing soiled and torn,
And his face so sad and pleading,
Yet so white and scared and worn.
Touched the old man's heart with pity,
Filled his eyes with misty light,
"Take her, boy, and make her happy,
Towser shall be tied to-night."

—Duroc Bill.

Facts About Japan.

While Russia is about twice the size of the United States, Japan is only about the size of the States of Missouri and Kansas combined. It is smaller than Texas. Alaska would make three countries of the size of it. California and Japan are about equal in size. In fact, there are no two political divisions of the earth anywhere which are so nearly alike in extent as California

and Japan. Missouri and Kansas together have a population of 4,500,000; Japan has a population of over 40,000,000, and this, too, without counting the Japanese population that has settled in Korea, in the island of Formosa, and the country adjacent. The idea prevails that Japan is a flowery kingdom and that it is the garden spot of the world. That it has flowers in profusion is a fact, but only one acre out of eight is fit for cultivation. The country is too mountainous and the soil too rocky to permit of being an agricultural country.

The people of the Western States, upon their first view of Japan would never be led to believe that the country was fit for agriculture. However, no portion of the soil is neglected. Every foot of ground is made to yield every iota of substance that it is possible to extract from it. Were this not strictly adhered to the majority of the people would starve, if dependence were not placed on outside sources. The average farm is about the size of the ordinary town lot in America. The greatest food production of the country is fish. It is thus that a country so small, comparatively, with a population so great, is compelled to seek new areas of expansion upon which to cast its ever increasing population. The possession of Korea, right at its side in a large measure affords the relief desired. In fact, for long periods in the past Japan has depended upon Korea for subsistence. Its food supplies came largely from the soil of its nearby neighbor. In consequence of this state of affairs the possession of Korea is vitally necessary to the existence of Japan.—Town and County Journal

Japanese Discipline.

The late war has revealed many things about the Japanese that we might copy and be the better and wiser for so doing. Mr. Lafcadio Hearn, in "Japan," says in regard to the government of children:

"Not merely up to the age of school life, supposed to begin at six years, but considerably beyond it, a Japanese child enjoys a degree of liberty far greater than is allowed to Occidental children. The general rule is that the child be permitted to do as he pleases, providing that his conduct can cause no injury to himself or others. He is guarded, but not constrained; admonished, but rarely compelled. In short, he is allowed to be so mischievous that, as a Japanese proverb says, 'Even the holes by the roadside hate a boy of seven or eight years old.'

"Punishment is administered only when absolutely necessary, and on such occasions, by ancient custom, the entire household—servants and all—intercede for the offender, the little brothers and sisters begging in turn to bear the penalty instead. To frighten a child by loud, harsh words or angry looks, is condemned by general opinion. All punishment ought to be inflicted as calmly as possible, the punisher gently admonishing the while. To slap a child about the head for any reason is a proof of vulgarity and ignorance.

"It is not customary to punish by restraining from play or by a change of diet or by any denial of accustomed pleasures. To be perfectly patient with children is the ethical law.

"At school discipline begins, but it is at first so very light that it can hardly be called discipline. The teacher does not act as a master, but rather as an elder brother, and there is no punishment beyond a public admonition. Whatever restraint exists is chiefly exerted on the child by the common opinion of his class, and a skillful teacher is able to direct that opinion.

"Each class is nominally governed by one or two little captains, selected for character and intelligence, and when a disagreeable order has to be given, it is the child-captain, the kyucho, who is commissioned with the duty of giving it. In higher classes the pressure slightly increases, and in higher schools it is very much stronger, the ruling power always being class sentiment, not the individual will of the teacher.

"It is never the domination of the one over the many that regulates class life. It is always the rule of the many over the one, and the power is formidable. The student who offends class sentiment will suddenly find himself isolated, condemned to absolute solitude. No

Royal Baking Powder Absolutely Pure

DISTINCTIVELY A CREAM OF TARTAR BAKING POWDER

It does not contain an atom of phosphatic acid (which is the product of bones digested in sulphuric acid) or of alum (which is one-third sulphuric acid) substances adopted for other baking powders because of their cheapness.

one will speak to him or notice him even outside the school until such time as he decides to make a public apology, when his pardon will depend upon a majority vote."

Japanese Currency.

The coins now chiefly used in Japan are copper, nickel, silver and gold; but in the country districts it is still possible to find brass coins of less than a mill in value. The copper pieces are $\frac{1}{2}$ sen, 1 sen and 2 sen; the 5-sen piece is the only nickel coin; the silver pieces are 5 sen, 10 sen, 20 sen, 50 sen and 1 yen; and the gold coins are 5 yen, 10 yen and 20 yen. There are also paper notes of 1 yen and upwards. One yen is \$0.4935, and 1 sen equals one-half cent. An American dollar equals 2.006 yen, and an American cent equals 0.02 yen. In 1897 the Japanese adopted the gold standard, so that change fluctuations with the Occident are slight, and the Japanese currency has fixed value at the rate of about 50 cents for the yen.

The favorite maxim of the Japanese is "See no evil, speak no evil, hear no evil."

Tested Recipes.

Hominy.—Shell 6 ears of white corn; put 4 quarts of water and 1 tablespoon of lye in an iron kettle; let come to the boil; put in corn and stir well; boil till the lye is thick like jelly and drain through colander and wash the corn through several waters; use a stick or spoon at first as the lye will hurt the hands, then wash with hands till the eyes are all out, and put back on stove and boil all day till the corn is soft and tender. Salt to taste. Keep in earthen dish in cool place. Season with meat fryings or butter and milk.—Mrs. May Ross, Alden, Kans.

Mush.—Three quarts water, 1 tablespoon salt, 1 quart meal; boil till stiff enough to eat with milk or let cool and fry.—Mrs. May Ross, Alden, Kans.

Corn-Bread.—Three cups meal, 1 tablespoon lard, 1 teaspoon salt, 1 teaspoon soda, 1 egg, and sour milk enough to make a thin batter. Bake in a hot oven.—Mrs. May Ross, Alden, Kans.

Apple Tapioca Pudding.—Soak 1 cup tapioca 3 or 4 hours, take 1 quart of stewed apples and mash fine, add the tapioca, 1 cup sugar, 1 teaspoon cinnamon essence; have the apples pretty juicy, as the tapioca takes it up; bake in not too hot an oven until the tapioca is clear. Eat with cream. Sisters, try it.—Mrs. A. B. Wright, Route 1, Plevna, Kans.

Rice Pudding.—One cup rice, 1 cup sugar, $\frac{1}{2}$ gallon sweet milk; stir all together in a pudding pan, grate on nutmeg and bake.—Mrs. Katie Wright, Route 1, Plevna, Kans.

Old-Fashioned Apple Butter.—Eight gallons cider boiled down to 4 gallons,

The American Boy

MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"
That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year)..... 1.00
KANSAS FARMER, 1 year..... 1.00

Total..... \$2.00
Both 1 year for..... \$1.50
Address,
KANSAS FARMER CO.,
Topeka, Kansas.

The Kansas State

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS.

When writing advertisers please mention Kansas Farmer.

8 gallons of apples after they are peeled and quartered and cooked tender in 2 gallons of weak cider, 1½ gallons sugar; put all together and boil down to 5 gallons.—Mrs. May Ros, Alden, Kans.

The Young Folks

Get to Work.

If the skies look dull to you,
Get to work;
If the atmosphere is blue,
Get to work.
Fostering your discontent
Will not pay the landlord's rent,
Will not gain for you a cent—
Get to work.

Brooding doesn't help your cause,
Get to work;
Nothing gained by picking flaws,
Get to work.
Weak are trampled by the strong?
You a victim of man's wrong?
Stand the storm, it won't be long—
Get to work.

If success shall come you must
Get to work;
There's no other way but just
Get to work.
It may yield no wealth nor fame;
Much or little, just the same,
If you perish you'll die game—
Get to work.

—Nebraska State Journal.

A Japanese Boy's Letter.

The awakening of Japan which occurred about half a century ago has been much written about in a general way of late. To fully appreciate the spirit that stirred the people of the "Land of the Rising Sun," one needs to know the motives that stirred an individual. The following is an account in "broken" English given in 1864 by one who afterwards arose to prominence in Japan. The letter was written to the man who soon after became Neesima's benefactor in America:

"I was born in the house of a prince (Itakura) in Yedo. My father (Neesima Tamiharu) was writing master of the prince's house and his writer, and my grandfather was an officer of the whole*, the prince's servant. I began to learn Japan, and China too, from six years age but at eleven years age my mind had changed quite to learn sword-exercise and riding horse. At sixteen years age my desire was deepened to learn China and cast away sword-exercise and other things. But my prince picked me up to write his daily book, although it would not have been my desire. I was obliged to go up to his office one another day, and I must teach small boys and girls, too, instead my father at home. Therefore I could not get in China school to learn China, but I read every night at home. A day my comrade lent me an atlas of United States of North America, which was written with China letters by some American minister.† I read it many times, and I was wondered so much as my brain would melted out from my head, picking out President, Building, Free School, Poorhouse, House of Correction, and machine-working, etc., and I thought that a governor of our country must be as President of the United States. And I murmured myself that, 'O Governor of Japan! why you keep down us as a dog or a pig? We are people of Japan. If you govern us you must love us as your children.' From that time I wished to learn American knowledge, but alas, I could not get any teacher to learn it. Although I would not like to learn Holland, I was obliged to learn it because many of my countrymen understood to read it. Every one another day I went to my master's house to learn it.

"Some day I had been in the prince's office and I got none to write at all. Therefore I ran out from the office and went to my master's house. By and by my prince stepped into the office, wanting to see me; but he saw nobody there, and he stayed me until I came back into. When he saw me he heated me. 'Why you run out from the office? I would not allowed you to run out from there.' After ten days I ran out from there again, but he would not know about it. But alas! in the next time he found out again I ran out from the office, and he heated me. 'Why you run out from here?' Then I answered to him that 'I wished to learn foreign

*That is, a steward, in charge of the private servants and attendants of the prince, pages, carriers, cooks, kago-bearers, etc.—an office of considerable dignity and responsibility.

†What is here called an "atlas" was a history of the United States, written by Dr. Bridgeman, of Shanghai, in China. After Dr. Bridgeman's death, his widow visited Dr. Brown, in Yokohama, and left with him a few copies of her husband's history, which were distributed by Dr. Brown. It was doubtless one of these copies which fell into Neesima's hands.

knowledge, and I hope to understand it very quickly; therefore, though I know I must stay here, reverence your law, my soul went to my master's house to learn it, and my body was obliged to go thither, too.' Then he said to me very kindly that 'you can write Japan very well, and you can earn yourself enough with it. If you do not run out from there any more I will give you more wages. With what reason will you like foreign knowledge? Perhaps it will mistake yourself.' I said: 'Why will it mistake myself? I guess every one must take some knowledge. If a man has not any knowledge I will worth him as a dog or a pig.' Then he laughed very hard about it, and said to me: 'You are a stable boy.' Besides him, my grandfather, parents, sisters, friends and neighbors, beat or laughed for me about it. But I never took care to them, and held my stableness very fast.

"After few months I got many business in the office, and I could not get out from there. Ah! it made me many musings in my head and made me some sickness, too. I would not like to see anybody, and would not desire to go and play myself, but I liked only to stay in a peaceful room. I knew it is bad sickness, therefore I went to some doctor, hoping to get some medicine. After he stay my sickness many times, he told me, 'Your sickness comes from your mind, therefore you must try to destroy your warm mind, and must take walk for healthfulness of your body, and it would be more better than many medicines.' The prince gave me many times to feed my weakness, and my father gave me some money to play myself. But I went every day to my master's house to learn Holland. I read up Holland grammar, spending many times, and I took a small book of nature, and I pleased to read it so much as I would saw that this book would be more better than doctor's medicine to my sickness. When my sickness got better, after few months, the prince picked me up again to write his daily book, and I must stay in the office every day against his order. Ah! I could not get out from there to learn Holland, but I got many times to read book at night, and I read through the book of nature at home, taking a dictionary of Japan and Holland. Alas! the study of night-time caused me weak eyes, and I was obliged to stop it, too. After ten weeks my eyes recovered entirely, and I began to read the book again; but I could not understand some reasonable accounts in it. Therefore I proposed to learn arithmetic. But I had not any times to learn it. A day I asked to the prince, 'Please get me some time to take knowledge.' Then he let me get out from there thrice a week, although it was not enough for me. I went to some arithmetical school to learn it, and understood addition, division, subtraction, multiplication, fractions, interest, etc. Then I took the hook again, and understood some reasonable accounts in it.

"Some day I went to the seaside of Yedo, hoping to see the view of the sea. I saw largest man-of-war of Dutch lying there, and it seemed to me as a castle or a battery, and I thought, too, she would be strong to fight with enemy. While I look upon her one reflection came down upon my head; that we must open navy, because the country is surrounded by water, and if foreigners fight to my country, we must fight with them at sea. But I made other reflection, too: that since foreigners trade, price of everythings got high, the country got poorer than before, because the countrymen do not understand to do trade with foreigners. Therefore we must go to foreign countries, we must know to do trade, and we must learn foreign knowledge. But the government's law neglected all my thoughts, and I cried out myself: Why government? Why not let us be freely? Why let us be as bird in a cage or a rat in a bag? Nay! we must cast away such a savage government, and we must pick out a president as the United States of America. But, alas! such things would have been out of my power.

"From that time I went to a marine school of government to learn navigation a week three. After many months I understood little algebra, little geometry, to keep log, and to take sun, to find latitude. Ah! the study of night-time caused me weak eyes again, and I could not study at all during the time of one year and a half which would not come again in my life. After my eyes got better I was obliged to go in the prince's office. That time was very hot and sickly season of Yedo. A day the sun shined very hard,



Simpson - Eddystone Black & Whites

Surprising what beautiful dresses can be made from these economical fabrics. Their fadeless color, durable material and artistic designs have given them the reputation "Prints of Quality."

Ask your dealer for Simpson-Eddystone Black & Whites.

Three generations of Simsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—ALL WOOL.

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a LOWELL INGRAIN.

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: LOWELL INGRAINS are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a LOWELL INGRAIN when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a LOWELL INGRAIN.

Manufactured by BIGELOW CARPET CO., New York

and in the evening it rained very heavy. Then I felt cold and chilled myself. The next morning my head began to ache, and my body was so hot as a fire would burn within me. I could eat nothing, but drank cold water only. After two days measles raised up all over my body. When the measles got better my eyes began to spoil, and I played and spent many times very vainly. A day I visited my friend, and I found out small Holy Bible in his library that was written by some American minister with China language, and had shown only the most remarkable events of it. I lend it from him and read it at night, because I was afraid the savage country's law, which if I read the Bible, government will cross whole my family. I understood God at first, and he separated the earth from firmament, made light upon earth, made grass, trees, creatures, fowls, fishes. And he created a man in his own image, and made up a woman, cutting a man's side bone. After he made up all things of universe, he took a rest. That day we must call Sunday, or Sabbath Day. I understood that Jesus Christ was Son of Holy Ghost, and he was crossed for the sins of all the world; therefore we must call him our Savior. Then I put down the book and look around me, saying that: Who made me? My parents? No, God. Who made my table? A carpenter? No, my God. God let trees grow upon the earth, and although God let a carpenter made up my table, it indeed came from some tree. Then I must be thankful to God, I must believe him, and I must be upright against him. From that time my mind was fulfilled to read English Bible, and purposed to go to Hakodate to get English or American teacher of it. Therefore I asked of my prince and parents to go thither. But they had not allowed to me for it, and were alarmed at it. But my stableness would not destroy by their expostulations, and I kept such thoughts, praying only to God: 'Please let me reach my aim.'

"And I began to read English from some Japanese teacher. A day I walked some street of Yedo, and suddenly met a skipper of a schooner, who knew me well and loved me, too. I asked to him, 'When your vessel going?' He answered, 'She will bound to Hakodate within three days.' I told him, 'I got warm heart to go thither. If you please, let me go thither.' He said me: 'I will take you to go thither, but perhaps your prince and your parents will not allow it to you. You must first ask to them.' After two days I took up some money, little clothing, and little books, and left quite my home, not thinking that if this money was gone how I would eat, or dress myself, but only casting myself into the providence of God. In the next morning I went on board of the schooner that would bound to Hakodate. When I came to Hakodate I searched some teacher of English, but

LOW ONE-WAY RATES

VIA

UNION PACIFIC FROM TOPEKA EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

To the Stockholders of the Farmers' Co-operative Shipping Association...

NOTICE

The Annual Meeting of the stockholders of the Farmers Cooperative Shipping Association will be held in Topeka, Kans., at the National Hotel, on Wednesday, April fourth, at 4:00 o'clock p. m. for the election of a Board of Directors and the transaction of such other business as may legally come before the stockholders' meeting.

F. ENOELHARD, President. H. R. SIGNOR, Secretary

Combination Thief - Proof Whip and Walking Stick

The Greatest Novelty of the age. No. 1 complete without one. Price, \$1.00 per set. Any part of U. S. Address

G. T. Davis Co., Tippecanoe City, Ind.

Send your orders quick.

I could not find him with many ways. Therefore, my head was quite changed to run away from the country. But one thought stayed me, that my grandfather and parents would sorrow about it, and it balanced my mind little while. But after one reflection came upon my head, that although my parents made and fed me, I belong indeed to Heavenly Father; therefore I must believe him, I must be thankful to him, and I must run into his ways. Then I began to search some vessel to get from the country.

"After many labors I got into an American vessel which would bound to Shanghai. After I came in Shanghai River, I joined to the ship Wild Rover, and had been in the China coasts with her about eight months; with the passage of four months, I come in Boston harbor by the kindness of God. When I saw first the ship's captain, H. S. Taylor. I begged to him if I get to America: 'Please let me go to school and take good education; therefore I shall work on the board as well as I can, and I will not take any wages from you,' and he promised me if I get home he will send me to a school and let me work on the board as his servant. Although he not give me any money, he bought for me any clothing, cap, shoes, and any other thing. At sea he taught me to keep log, to find out latitude and longitude. When I came here the captain let me stay on the board the while, and I had been with rough and godless men who kept the ship, and every one on the wharf frightened me. No one on the shore will relieve you, because since the war the price of everythings got high. Ah! you must go to sea again. I thought, too, I must work pretty well for my eating and dressing, and I could not get in any school before I could earn money to pay a school. When such thoughts pressed my brain I could not work very well, I could not read book very cheerfully, and only looked around myself long while as a lunatic. Every night after I went to bed I prayed to the God: 'Please do not cast me away into miserable condition. Please! let me reach my great aim.' Now I know the ship's owner, Mr. Hardy, may send me to a school, and he will pay all my expenses. When I heard first these things from my captain my eyes were fulfilled with tears, because I was very thankful to him, and I thought, too: God will not forsake me."

Neesima.

In the miracle and romance of missions not much surpasses the story of Neesima. He was born in the capital of the Empire of the Rising Sun—Tokyo, Japan, February 12, 1843. At this time a strange passion to see the Occident, especially the United States, took possession of him while reading a geography. At the same time a stray copy of the Bible in the Chinese language came into his hands. The reading of it led to his conversion. In his twenty-first year, at great personal peril, he fled from his native country. En route he sold his sword for a Chinese New Testament. The owner of the ship on which he landed in Boston Harbor, the Hon. Alpheus Hardy, befriended the young foreigner and put him in the way of the education for which he thirsted. In his twenty-sixth year he graduated with honor from Amherst College. In a most unexpected way he had the privilege of supplementing the teaching of the school by personal observations in the capitals of every nation on the continent of Europe. He was attached to the Japanese embassy, especially commissioned to study the educational systems. He returned to America and graduated from the theological seminary of Andover, Mass., in 1874. He was ordained as the first Japanese Christian evangelist and returned to his native land the same year. His most marked achievement was the founding of the great Japanese Christian University and Theological School at Kyoto. In spite of persistent opposition and great peril he succeeded. The school bears the name "Doshisha," meaning "One Endeavor." It was opened in 1875, and has 700 students. Neesima died January 23, 1890, whispering the words, "Peace! Joy! Heaven!" Governor and Buddhist priest joined Christians in his funeral procession.

A Fellow-Feeling.

"I'm not more than you," said the father.
"When I punish you, son," and
thereat
he raised his head as he sobbingly
said,
"Well, there's some consolation in
that!"—Woman's Home Companion.

The Backbone of a Mighty Nation

is good food—food for brain, food for brawn, food that is strengthening, that gives energy and courage. Without a proper appreciation of this great fundamental truth no nation can rise to greatness.

As an article of food, soda crackers are being used more and more every day, as is attested by the sale of nearly 400,000,000 packages of **Uneeda Biscuit**, which have come to be recognized as the most perfect soda cracker the world has ever known.

And so **Uneeda Biscuit** will soon be on every table at every meal, giving life, health and strength to the American people, thus in very truth becoming the backbone of the nation.

NATIONAL BISCUIT COMPANY

The Little Ones

Mud Pies.

Of all the enjoyments under the skies, There's nothing so jolly as making mud pies.

Prepare a nice shingle, or short, narrow plank, Lay it carefully down on a bright, sunny bank.

Take the freshest of earth and the cleanest of sand And mix them up thoroughly well with your hand.

Add a cupful of water, then stir with a stick. A little more water, if it seems too thick.

Now take up a lump of this beautiful dough, About just enough for a mud pie, you know.

Roll it softly around, and give it a pat. Don't have it too humpy and yet not too flat.

Lay it down on the board to bake in the sun, Then make all the others just like this one.

Then sprinkle white sand over each little cake, And leave them about fifteen minutes to bake.

And when they are done, you'll certainly say: "That's the most fun I've had for many a day."

—Unidentified.

Only an Ant-Hill.

MRS. A. D. GRAY.

"Don't—Oh, don't Helen! You'll kill them; and that's their house, mother said so." The sound of a teasing laugh came to me.

"I guess it doesn't matter," said Helen's voice. "It's only an ant-hill, and I don't suppose they know if they are killed. Sides, I don't believe its their house; ants don't have houses. My mother didn't tell me 'bout it."

The two little girls were sitting on the steps of the side porch. Helen had a tiny parasol in her hand, and she was just about to poke it into an ant-hill at the end of the steps, when Ruth caught her hand.

She looked very much relieved when she saw me at the window. Ruth never takes any pleasure or finds any amusement in hurting anything that has life, but, strange as it may seem, there are some little children who do. "If you two little girls wish me to, I will tell you something about ants," I said. "They are the funniest little things to study, and they have some habits much like people. They seem to plan and to think. They have different trades, too, as people do. There are soldier-ants, and farmer-ants, and carpenter-ants, and a lot more."

"Oh my!" said Helen in astonishment. "It's right funny that I never heard about it. P'raps my mother doesn't know—but of course my father knows—he knows about everything."

It's funny he didn't tell me." Helen was inclined to doubt my statement, but too polite to say so.

"Well, I'm going to draw my chair close to the window—like this—and while I sew, I'll tell you about—which shall it be—farmer-ants? I read it in a book called "Our Friends by the Wayside." It is a nice book for children to own, too, because it teaches them to be interested in the life and habits of the tiny, living things about them. It teaches them to be kind, too." "I'll get my father to buy me one," said Helen in an undertone.

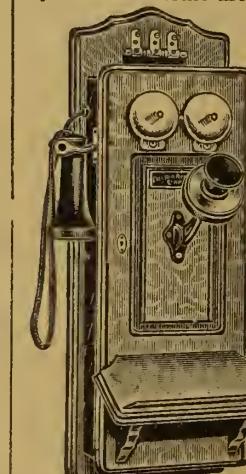
"Ants live in nests in the ground. The part that is above the ground is like a small, rounded hill, and this gives it the name ant-hill. This is their home. They are the most industrious of any living thing of which we know. The queen-ant selects the place for her home, and builds away at it, until her children are large enough to help with the work. When she has decided where to build her home, she takes off her wings, for they would be so in her way while she is digging, and she knows that she has a big job before her. She chooses very carefully the place for her home, for the earth must be of just a certain kind. Did you ever see a dog after a rabbit? Well, that's just the way an ant begins to dig. She puts her head close against the ground, and digs away very fast with her fore feet, tossing the dirt back between her hind legs. When the hole becomes too deep to use her feet alone, she uses her jaws for biting off the earth. She rolls the dirt up into hard balls, and carries them out, one by one. After a hallway two or three inches long is made, she begins on rooms. These are for the food, for eggs, and for the young. By this time, some of the baby ants have grown big enough to help, and the work goes faster. The jaws of an ant have tiny teeth. Sometimes in an old work-ant, the teeth become entirely worn off. Their feet and jaws are made for digging. The feet are covered with small, fine hairs, and this is why an ant can crawl over glass, or upside down on a wall.

The rooms in an ant-house are sometimes round, sometimes square, and are even shaped like a horseshoe. They have bedrooms, pantries, nurseries and dining-rooms. Sometimes they line the walls with a sticky kind of glue, which they make, and this makes the wall very hard and smooth. When the house is finished, the queen is done with work; but they take her wings away so she can never leave home again. If she starts to crawl away, an ant that is kept always on guard picks her right up, and carries her home. This seems a little hard. If we visit an ant-hill and have a magnifying-glass to help us to see better, we will find the halls full of working ants, running about, bringing in the food, waiting upon the queen or carrying out balls of dirt. There are always guards kept at the top of the house to give warning if any danger comes.

C The best hand on the farm is one that accomplishes the most in the shortest time. The farm telephone sends messages instantly over the miles your team would have to trot for hours. The work is half done when you have delivered the order. A dozen times a day the telephone will be useful and any one, particular call may pay for the entire cost of putting in and maintaining the line for a year.

C A veterinary surgeon may come out and save your best horse. The doctor may be had in the nick of time to save your life or some member of your family.

No man can know the exact worth of a 'phone on the farm until he uses One. We show here with the best telephone made for farm use, the "EACO," a special farm type telephone with special 5-magnet generator and 1600 ohm ringer. Will ring more bells than any other and is constructed in the best possible manner. Takes little wall space, handsome from every point of view and low in price. For all round practical use there is none better. Fitted with our X.P. Condenser, which makes it possible to call up any subscriber when receivers are off. Send today for our free book "How to Buy the Right Phone." It tells all about the "EACO" phone, how made and why you should buy it.



ELECTRIC APPLIANCE COMPANY

Dept. P Chicago, Ill.

\$41.00 Split Hickory

Top Buggy, made to order, guaranteed 2 years; sold on 30 days Free Trial. Tell us the style vehicle you want. 1906 catalog, 100 styles, FREE. Send today.

The Ohio Carriage
Mfg. Co.
H.C. Phelps, Pres.
Station 251
Cincinnati, O.



THE BEST HAND ON THE FARM

THE SCIENTIFIC FARMER

Will enable you to increase your yields per acre by applying Scientific Knowledge to your farm. It is devoted to the

CAMPBELL SYSTEM

And is edited by men who know. Subscription price \$1.00 per year, including Campbell's Manual of Soil Culture. Sample copy, 10 cents.

THE SCIENTIFIC FARMER, 1715 California St., Denver, Colo.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas.

The idle queen drops her eggs anywhere, and the little work-units pick them up carefully and take them into one of the soft, warm bedrooms.

"In cold weather they all stay at home, and if it begins to rain when they are out, how they all do scurry for the house! Doesn't this seem as though they could think and plan things? In the hottest hours of the day, they stay in and rest.

"If you will put a nest of ants into a large, glass jar, and put in some earth for them to build with, and some sugar for food, and then cover the jar with brown paper, they will make a home. When you take the paper off, you can see the rooms and hallway. You must keep the jar on a shelf out of doors, the back porch is a good place. People who know a great deal of ants and their habits, study them in this way.

"Ants have always been known to be very wonderful little insects. Even as long ago as Bible times, a very wise man said, 'Go to the ant, thou sluggard, consider her ways, and be wise.' Suppose we put a little yard of sticks around this ant-hill, so that nothing can destroy it, and then we will see what we can learn of their habits."

"Oh—lets do!" said Helen, "and when I am coming over here, I'll say, 'I must go see my ants,' and nobody will understand. But you didn't tell about the farmers and the carpenters."

"I'll save that for next time. I'm sure this is quite all you'll remember now."

"I'm glad I didn't poke my parasol into their house," said Helen, "and I'm going to tell my mother about this."

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wleshard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).

Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).

Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chaitco Club, Highland Park, Shawnee County (1902).

Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).

Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).

West Side Forestry Club, Topeka, Shawnee County, Route 8 (1902).
Fortnight Club, Grant Township, Reno County, (1903).

Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).

The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County.

Taka Embroidery Club, Madison, Greenwood County (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1902).
Cosmon Club, Russell, Kans.

The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.

(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

FAMOUS WOMEN.

Queen Elizabeth.

Roll Call—Names of notable people of the Elizabethan era.

I. Woman as a sovereign.

II. Establishment of the Church of England.

III. Progress and prosperity of Elizabeth's reign.

IV. Elizabethan era.

If Elizabeth had lived in our age, she would have been considered a wicked and scheming woman—heartless and cruel, but compared with other rulers who preceded her, and considering the age and the circumstances surrounding her, she was really a remarkable woman, and her accession to the throne was hailed with great rejoicing. Very little is said about her life before she became queen of England. She was the daughter of Henry VIII and Anne Boleyn, was a precocious child, and was, next to Lady Jane Grey, the best educated woman of the time.

I. As a sovereign she was counted the first among the great rulers of the world; and a study of her life and the times during her reign, considering the existing conditions and seemingly insurmountable difficulties she overcame, of her leniency and patience, convinces one of the fact. A paper discussing the policy she pursued, her administration

of justice, and her influence upon the times, would be interesting and instructive.

II. A discussion of the religious conditions in England at the time when Elizabeth ascended the throne, and the growth and development of the same, giving a brief history of the establishment of the church of England, might constitute a paper under this second topic.

III. England made great strides in civilization during the forty-five years of Elizabeth's reign. At its beginning everything was in a very crude state—agriculture, commerce, and manufactures were in their infancy. The comforts of life were wanting even by the rich. Enterprise of all kinds was restricted to narrow limits. It will be interesting to note the progress made during this period.

IV. Under this subject could be written most anything transpiring or developing during Elizabeth's sovereignty, but let that pertaining to the literature and art, and about the great thinkers and writers of the time, come under this subject. Shakespeare, Ben Jonson, Francis Bacon, Lord Burleigh, Sir Walter Raleigh and Cranmer are some of the great men of that time.

The Jewel Reading Club.

The "Mutual Improvement Club" made its demise. It did not occur to me upon my return after an absence of almost a year, that it was incumbent upon me to attempt to resuscitate it. Since then we have a new club, "The Jewel Reading Club," a nice country club with a membership of fourteen. Mrs. Dorr Blood, president; Miss Leona Shaw, vice-president; Mrs. Sherman Young, secretary; and Mrs. M. Pollard, treasurer. The club meets on Thursday afternoon of each week, the club home being with Mrs. M. Pollard as occasion demands; otherwise, the meetings are held with the members in turn. The president appoints three readers for each meeting. The Dictionary is an important part of each meeting and if there is any question about the right pronunciation, it is soon settled.

Another thing which has been of much interest is to bring words which are incorrectly pronounced, and after giving each one an opportunity to correct, the person presenting the word is expected to do so, as she is supposed to have prepared herself before giving the word. The club began its labors by reading "Little Jewel," by Clara Louise Burnham, followed by its sequel, "The Right Princess," by the same author. The next was "Dr. Jeckyl and Mr. Hyde," and last "Ben Hur." Each reading has been discussed and the interest has been something wonderful. We have found that the attendance has been regular, no one wishing to miss a meeting, lest the thread of the narrative be lost. Music is also a part of each meeting and occasionally a varied program is given.

This club is located along the boundary lines of Shawnee and Osage Counties, and is federated with "The Osage County Federation."

We wish every locality might have an interesting and helpful a club as this one is to its members.

EMMA TROUDNER.

Carbondale, Kans.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

Copyright, 1906, Davis W. Clark, D. D.
First Quarter—Lesson XI—March 18, 1906.

The First Quarterly Review.

"The Finding of Jesus" might be taken as the general topic for all the lessons of the three months just closing. The shepherds found Him. Their very occupation led them to be reverent and contemplative. They were much in the solemn stillness of the night and in the company of the heavenly planets. These mystic star-gazers may have been in communion with heaven at the very time of the nativity. The Wise Men found Jesus. On the dark background of Herod's murderous jealousy and Jerusalem's cold indifference the moral earnestness of the Magi shines with pleasing luster. They took a thousand-mile journey to find the babe. Neither Herod's jealousy nor Jerusalem's indifference nor the mean place of the nativity daunted them. . . . The boy Jesus finds himself. Arriving in Jerusalem at the feast, it was not the prodigious mass of humanity assembled there, not the golden and marble temple, not even the solemn and speaking ceremonial—not these, but the Messianic idea and the dawning consciousness, "I am He," absorbed Jesus and made Him oblivious to time and place and human relationships. . . . John the Baptist

finds Jesus. When he was at the very zenith of his power, his congregations largest and his influence widest, unexpectedly one day Jesus stood before him asking baptism. John started back in self-deprecation, at once recognizing and acknowledging the infinite superiority of the one who stood before him. . . . The tempter found Jesus: It is indifferent whether one believes this an approach of a literal devil, or a figurative description of a moral struggle entirely subjective. It is enough to know that Jesus triumphed. It was the victory of humanity, not of deity—and so was our victory as well as His. . . . The disciples found Jesus: Their previous calls had been preliminary and progressive, but this was final. He had had a rupture with the ecclesiastical establishment and must needs organize His followers. He prefaced this last call with a thrilling pictorial miracle which significantly taught them what they must be and do. . . . Sufferers find Jesus: A miracle mercifully wrought upon a poor possessed one in the synagogue at Capernum was a silver bell whose notes had sounded in every shadowed home. In obedience to its encouraging call, when the setting sun had absolved the people from their overstrained ideas of Sabbath observance, they came to Him whose sovereign power had had such a conspicuous exemplification. Power to forgive is found in Jesus: To the paralytic, let down through the roof by the faith and persistence of his friends, Jesus' first words were indescribably comforting: "Son, be of good cheer." But there is a surprising change in the formula. It is not a rebuke to disease. It is a categorical, authoritative remission of sin. The starting words could not escape the notice of the inquisitorial coterie of Scribes and Pharisees. It was not intended they should. It was Jesus' gauntlet at their feet. They picked it up, but not in audible words of dissent. It is equally as easy to forgive as to heal, and vice versa. But that you may know that I have authority and power to do both, I will also say to this utterly powerless person, "Arise." He spoke and it was done. . . . The people find Jesus a divine teacher: The Sermon on the Mount is an inaugural. As such it takes on a dignity and importance all its own. It irradiates the fundamental principles of the kingdom of God and prescribes the character and conduct of its subjects. Jesus' ideal was the exact reverse of that popularly entertained. The people wanted an objective kingdom. He showed them only a subjective one. They wanted one of brute force; He unveiled one of meekness, unarmed with carnal weapons.

Extravagance.

Bill.—"Say, John, who is the most extravagant person you know?"

John—"That's easy. It's my wife, Sallie."

Bill—"No, it's Tom Allen. He blew in a hundred dollars this spring just for nothing."

John—"You're joking. Sure Tom never spent a cent foolishly in his life."

Bill—"Well, there he comes now and I'll leave it to you. See that horse he's driving. That's that 6-year-old mare I sold him this spring for \$250, and she was worth it; but he let her get sore shoulders and she ran right down till now you, nor me, nor no one else wouldn't offer more than \$150 for her, and if it isn't extravagant to knock a hundred dollars off the value of a mare when 25c for a box of Security Gall Cure would have saved it, then I don't know what extravagance it."

The remarkable growth of Tacoma, Washington, is well shown in the advertisement of that city and its tributary country, that will be found upon another page of this issue. The city itself has increased in population from 37,714 in 1900 to 85,000 in 1906. This great growth is caused by its having become a large manufacturing center, and by its unequalled position as a seaport.

Just at present five great transcontinental railroads are crowding into that city and its growth has become still more stimulated. The remarkably mild climate, where the grass is green and flowers bloom the year round, makes it an especially desirable place of residence, while its school facilities are of a high class. Every one who reads this should at once write to Secretary Pratt of the Tacoma Chamber of Commerce, for the beautiful descriptive books he is issuing describing Tacoma and its opportunities, and the incredible results received by its fruit- and berry-growers in the rich valleys surrounding the city.

No Complaint in Four Years.

Clarence, Mo., Jan. 10, 1906.
The Lawrence-Williams Co., Cleveland,
Ohio:

I sell Gomhault's Caustic Balsam, and lots of it, too. I do not hesitate to guarantee Caustic Balsam to do everything it is guaranteed to do, for once used, they use it altogether, and I have never heard any complaint in four years past.

M. H. SCRUTONFIELD,

Serious Business

facing a bear without U. M. C. cartridges in your gun. They have terrific striking force and are sure fire. Buy of your dealer. U.M.C. cartridges are guaranteed, also standard arms when U.M.C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY

BRIDGEPORT, CONN.
Agency: 313 Broadway, New York

A Living Monument.

If we were to assemble all those who have been cured of heart disease by Dr. Miles' Heart Cure, and who would to-day be in their graves had not Dr. Miles' been successful in perfecting this wonderful heart specific, they would populate a large city.

What a remarkable record—a breathing, thinking, moving monument, composed of human lives,—that for which every other earthly possession is sacrificed.

The Miles Medical Co. receive thousands of letters from these people like the following:

"I feel indebted to the Dr. Miles' Heart Cure for my life. I desire to call the attention of others suffering as I did to this remarkable remedy for the heart. For a long time I had suffered from shortness of breath after any little exertion, palpitation of the heart, and at times terrible pain in the region of the heart, so serious that I feared that would some time drop dead upon the street. One day I read one of your circulars, and immediately went to my druggist and purchased two bottles of the Heart Cure, and took it according to directions, with the result that I am entirely cured. Since then I never miss an opportunity to recommend this remedy to my friends who have heart trouble; in fact I am a traveling advertiser, for I am widely known in this locality."

J. H. BOWMAN,
Manager of Lebanon Democrat,
Nashville, Tenn.

Dr. Miles' Heart Cure is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails he will refund your money.

Miles Medical Co., Elkhart, Ind.

REAL ESTATE.

FARMS FOR RENT—Wheat farm and two dairy farms. Would rent cows to good men; also want to get 300 acres of prairie broken up at \$1.50 an acre. W. W. Cook, Russell, Kans.

I HAVE for sale a 1760 acre stock farm or ranch; bottom and alfalfa hay; good buildings and a 640 acre stock and hay farm. Write me and let me send you descriptions and prices. E. H. Boyer, Meade Co., Meade, Kans.

FOR SALE—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

FOR SALE—Forty-two acres of land adjoining the city of Erie, Kansas, county seat of Neosho. This land was formerly the old fair grounds, and has about \$3,500 worth of buildings on it; some timber, good soil, and plenty of water. Will make the finest place in Kansas for a hog farm. Will sell or rent or go in partnership with a good man with some money who understands raising pure-bred hogs. C. E. Shaffer, care of Kansas Farmer.

TO TRADE for stock, good 160-acre farm in Cherokee County. H. H. High, Faulkner, Kans.

READ, CONSIDER, COME, OR WRITE—80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realty Co., Clay Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Qulsenberry, Marion, Kans.

FOR SALE—320 acre well improved farm, 6 miles from Emporia. Price \$25 per acre. Write Hurley & Jennings, Emporia, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

40-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I havent. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE—in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

FOR SALE—2½ sections 1,600 acres, 6 miles from Sharon Springs, Wallace County, Kansas. Greatest bargain you ever heard of at \$1.25 per acre. You can't buy anything adjoining for less than \$5 or \$6 per acre. Will take \$1.25 per acre, balance in U. P. contract running 9 years. I need some money and will sacrifice for quick sale. If you haven't got all cash might take your note for \$800 or \$1,000 payable \$200 every six months.

I have 160 acres nice smooth land in Wichita County. Will take \$650 for it.

160 acres No. 1 farm near Oakley, Logan County, 130 acres in cultivation, at \$10.50 per acre—these are bargains. Address J. W. Ferguson, R. F. D. 1, Topeka, Kans.

SEVEN miles from Emporia we have for sale at \$50 per acre 125 acres of creek bottom land with 2 wells, 2 windmills for stock, well and cistern at the house. House is two story, frame, shingle roof; 6 rooms and summer kitchen. Barn 32 by 40, large tool house, cattle sheds about 20 by 120. Stone wall along the entire north side. Large granary, Fairbanks scale, good timber, plenty for fuel; 10 acres of growing alfalfa; 20 acres of pasture, good apple and pear orchard. One mile to school and 3 miles to the station. Telephone in the house—can talk to 2,800 people for \$6 per year. Everything here is in good repair; orchards in their prime. Hurley & Jennings, Emporia, Kans.

CASH FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 415 Kansas Avenue, Topeka, Kans.

The Master's Address.

(Continued from page 232.)

source. It is a matter of the greatest importance to the advancement of agriculture and the welfare of all the people of the country, that a mutual understanding of this matter be fully established, and that the great influence of those liberally endowed and splendidly equipped institutions, established in every State and Territory, be exerted in this direction. The bulletins of the experiment stations carry the valuable results of costly and important experiments to a vast number of students in farmhouses, and they should be carefully studied and the information applied to farm operations.

NATURE STUDIES IN PUBLIC SCHOOLS.

The general trend towards the use practical, in place of simply theoretical, studies for mental development in educational methods, renders it an opportune time to urge the introduction of the principles of agriculture, or in other words, nature studies in the curriculum of public schools. However desirable may be the form of education that contributes to culture and refinement, unless such training is accompanied by knowledge of nature's processes, the possessor of such education may find himself able to shine in society, but be unable to make the best use of his faculties, and thereby contribute useful service to the community as a citizen. The general adoption of this feature of education depends more upon a public sentiment favorable to it than upon forced legislation, and we recommend that the subject be given frequent and earnest consideration by the subordinate, Pomona and State Granges, as well as in the deliberations of this body.

COOPERATIVE BUSINESS.

In addition to cooperation in its broader sense, as applied to church, school, grange, and citizenship, in varied relations to town, county, State and Nation, there is a necessity for business cooperation. I said in my annual address, one and two years ago:

Individual members may form cooperative or stock associations, such as mutual insurance, fire and life companies, savings banks, trust or loan associations, building and loan companies, elevator associations, cold storage plants, warehouses, and may establish feed stations, stock exchange and sale yards, butter, cheese, and condensed-milk factories, and such other business arrangements as may be found necessary to facilitate the speedy and economical sale or purchase of the products and supplies of the farm. All business associations should be established on sound business principle, and managed by honest men with large experience and qualifications, and all transactions should be conducted on the cash system. Under no circumstances should the credit system be encouraged. Neither the Order of the Patrons of Husbandry, subordinate, Pomona, State or National Granges should, as an organization, be involved in any of these business enterprises."

These cooperative enterprises, when established and conducted upon sound business principles by capable and honest men, afford farmers an opportunity to escape contributing to such extortions as have recently been uncovered in some of the great financial institutions of the country. Such extravagance as has been brought to light in the management of life-insurance matters, involving the financial interests of a vast number of policy holders, is a convincing argument in favor of mutual insurance.

NATIONAL AID FOR HIGHWAYS.

The policy of national aid for the improvement of transportation facilities is as old as the government itself, and as fully recognized by Congress as any national policy. Great railroad companies have been granted aid in the form of land and money to construct railroads and improve transportation facilities across the continent thereby; millions of the people's money have been appropriated to dredge rivers and harbors, and still greater sums of money are to be expended in the construction of the Isthmian Canal. This money is expended not to open avenues of travel, but to improve those already in existence by allowing transportation over the same routes by improved means of conveyance made necessary by the greater volume of traffic. This is an exact contrast with the conditions existing in regard to our main highways. The increased demands upon these highways for the transportation of commodities render them inadequate in their present condition, and it is beyond the resources of local property owners to properly improve them. Increased traffic brings no increased revenues, as in the case of transportation

REAL ESTATE.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prantice, 156 Wabash Avenue, Chicago.

FOR SALE—640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

IF YOU WANT A HOME
Write HAYES, "The Land Man,"
Drawer K, - - Almena, Kans.

Nemaha County Farms

Nemaha County, Kansas cannot be excelled in the production of Corn, Oats, Millet and Speltz. Here Alfalfa, Clover and Blue Grass have no equal. Write for prices and description.

KNIGHT & SPICKELMIER, Centralia, Kans.

FOR SALE

Farm 2,160 acres, 570 acres in wheat. 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, - - Kansas

If you have any farms, ranches, or city properties for sale or trade anywhere in the State, we would like to have you list the same with us by sending a thorough description together with lowest prices and best terms. We have a fine list of city properties in Topeka and farms around the city, some for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS.
116 E. Fifth St., Topeka, Kans.

Who Is H. P. Fitzgerald?

He is the man who can sell you land anywhere in Kansas. One hundred and sixty acres 2½ miles from Jamestown. Fine improvements, also best of wheat land. This farm can be had for 30 days at \$4,000, also 160 acres of farm adjoining, same price, all under cultivation.

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of Kansas, 200 miles west of Atchison, on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa and other cereals, successfully.

THE DOWNS REALTY CO.,
Downs, Kansas.

Hurley & Jennings' Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate and Loan Co.

Holton, Kansas,

Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

NO ONE WHO VISITS COLORADO CAN AFFORD TO MISS A TRIP OVER THE SWITZERLAND TRAIL OF AMERICA.

The Colorado and Northwestern R. R. DENVER to Eldora and Ward

Takes you to the CONTINENTAL DIVIDE; to the land of perpetual snow and through the great Gold, Silver and Tungsten Mining Camps of Northwestern COLORADO. Challenges the world for Scenic Grandeur and Beauty.

Leaves DENVER (Union Depot) 8:00 a. m.
Returning, arrive 5:45 p. m.

Wrote.
L. R. FORD,
General Passenger Agent,
Boulder, Colorado.

REAL ESTATE.

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. NIQUETTE BROS., Salina, Kansas.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice, Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
819 Walnwright, St. Louis.

H. C. BOWMAN,

SHAWNEE COUNTY FARMS.

TOPEKA RESIDENCE AND MERCANTILE PROPERTY.

VACANT LOTS.

TEXAS RANCH LANDS,

42 Columbian Bldg., Topeka, Kans.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.



BUY

IRRIGATED LANDS

—IN—
Sunny Southern Alberta

Where the "rainfall" is always under your control, when you want it, where you want it and as much as wanted.

100,000 ACRES

of the finest irrigated land in the finest section of country on the face of the earth

at from \$18. to \$25. an Acre

on easy terms with perpetual water rights guaranteed forever by the Canadian Pacific Railway at only 50¢ Per Acre Per Annum.

Do You Know ?

of an irrigated proposition that will equal this and actually the finest land lying "out of doors," Deep, Black Loam Soil with Clay Sub-soil; produces 30 to 55 bushels hard wheat to the acre, magnificent crops of alfalfa and sugar beets. These lands are along the main line of the Canadian Pacific Ry. at Gleichen. Remember these lands are not in a wilderness, but within easy access to good markets, schools and churches. We have some attached areas of non-irrigable land which are covered with a rich growth of grass and are perfect for grazing lands, which we will sell in conjunction with their irrigated land making an ideal combination for farming and stock raising.

THERE ARE BUT A FEW of these combination farms. It would be well for you to make selection at once. For maps, descriptions and certificate for low railway rates, address

Canadian Pacific Irrigation

Colonization Co. Ltd.

CALGARY, ALBERTA, CANADA

lines owned by individuals, or waterways used by public carriers. The farmers of the United States are practically unanimous in their request for National aid in the improvement of highways over which all of the people travel free, as has been accorded for the improvement of the great railroads and waterways over which people who travel are required to contribute to private enterprises. It is as important to improve a thousand miles of road over which a hundred thousand people travel daily without contributing to its maintenance, as to improve ten miles of waterways over which people and commodities are transported only by contributing to the profits of private transportation companies. This matter will receive earnest consideration at this session of the National Grange.

RURAL MAIL DELIVERY.

A message to this organization, representing the farmers of the country, would be incomplete without reference to rural mail delivery, which is one of our grandest achievements. We have seen this branch of the postal service expand from an experiment of doubtful success to a comprehensive system, reaching nearly one-half the rural population, largely through the work and influence of the grange. Its success in breaking up the isolation of farm life and in advancing farm values has been phenomenal, and entitles the Grange to refer to it as one of its greatest victories. Over 30,000 rural mail carriers serve 15,000,000 people better than the people served themselves, at a fraction of the cost, and enable them to receive their daily mail without coming in contact with demoralizing influences that often lurk in centers of population. Rural mail delivery is a promoter of intelligence as well as a great financial benefit to the farmers of the country. We recommend its still further extension and development.

THE PARCELS POST.

This organization has repeatedly endorsed the parcels post as an appropriate sequel to rural mail delivery, and we have only to refer to its success in all the leading European countries as evidence of its practicability. The Postoffice Department of the United States Government has recommended its establishment upon rural routes, which probably would meet with but little opposition from sources from which opposition will come on the establishment of a general parcel post, for it would to that extent interfere with the profits of no corporations doing business as public carriers. The parcels post would be of special advantage to farmers as they are generally unable to have packages delivered to them by express companies. It seems incredible that the financial interests of a comparatively small number of people engaged in the carrier service, should long prevail against the interests of 80,000,000 people who would derive benefit from the parcels post, especially in view of the success it has achieved in almost every other civilized country in the world. It only requires an aroused public sentiment upon its probable advantages to our people, to cause our National lawmakers to give serious consideration to this matter, and we urge a vigorous campaign for securing it.

INFLUENCE ON LEGISLATION.

Along the line of legislation the influence of the Grange has been exerted for many years, moulding public opinion and crystallizing it into laws for the benefit of agriculture, the farmers, and people in general. Among the laws already secured might be cited:

The Interstate commerce law establishing an interstate commission to regulate transportation on a basis of equality between shippers and localities, to secure fairness between shippers and common carriers, and to prevent discrimination between individuals and localities.

The securing and continuous existence of free rural delivery.

The act of February 19, 1903, enlarging the powers of the Interstate Commerce Commission, and of the courts, to prevent secret rebates.

The so-called Sherman "anti-trust" law of 1890, and the various amendments since that time enacted.

The act of February, 1903, creating the Department of Commerce, having authority to secure full information regarding the organization and operation of corporations engaged in interstate commerce.

The Hatch act for the establishing of State experimental stations.

The separation of the agricultural schools from the classical colleges, directing that additional appropriations for agricultural colleges be confined to instruction in agriculture and mechanic arts.

The Grout bill, protecting the dairy

REAL ESTATE.

Phillips County and Western Kansas

280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; my price \$25. 160 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 a. W. B. Gaumer, Phillipsburg, Kas.

HOBBES & DETWILER

Real Estate Dealer Smith Center, Kans.

We handle Smith County Lands, located in the best corn county in Kansas. Write us for full particulars and complete land list.

Partial List of Farm Lands For Sale By Norton Land Company

NORTON, KANSAS

No. 106—160 acres, 7 miles out, farm house with four rooms, good stable and sheds, all fenced and cross fenced, 80 acres in cultivation, good well and mill, 10 acres alfalfa, two pastures, a good bargain at \$20 per acre. One-half cash, balance to suit purchaser, possession at once if sold soon.

No. 109—320 acres farm, 200 acres in cultivation, good new frame house, 120 acres pasture all fenced, good well and windmill, stable, sheds, etc. Price \$6,500. Terms given.

No. 196—160 acre farm, 120 acres in cultivation all in wheat, one-half of wheat goes with farm. This is a number one farm practically all smooth, no buildings. Price \$3,500. One-half cash.

No. 209—680 acre ranch, 110 in cultivation, 20 acres in alfalfa all fenced and cross fenced, new frame house 24x24, barn 16x36, two sheds, feed lots, corrals, etc. Price \$14 per acre if taken soon.

No. 182—160 acres, 100 acres in cultivation, all smooth land, good house with 5 rooms, stable, sheds, corral, etc., all fenced, some alfalfa. Price \$26 per acre.

No. 125—40 acres, close in, fine land, mostly alfalfa. Price \$1,700.

No. 175—160 acres in cultivation, balance pasture, all fenced, frame house with four rooms, good well and windmill, stable, corral, all smooth land. Price \$4,000. \$2,400 cash, balance on time to suit.

No. 206—320 acres, 200 acres in cultivation, balance pasture all fenced, frame house with 4 rooms, granaries, sheds for 100 head of cattle, stable for 8 head of horses, well and windmill, fine grove. Price \$22.50 per acre, within three miles of station.

A GOOD HOME PLACE AT A GREAT BAR GAIN.

160 acres, well improved, good frame house with four rooms; good barn, room for 20 head of horses, granary room for 7,000 bushels of grain, fine bearing orchard, all kinds of fruit. Two feed lots, corn cribs, etc. Well and windmill, 300 barrels' tank room, 40 acres alfalfa, all fenced and cross fenced, all smooth land. One of the best farms in the county and situated in as good a farming community as there is in the West. This farm can be bought for \$5,500 if taken within the next 30 days. If you want this, a real good farm, well improved, come and see this one quick.

A CHOICE FARM OF 320 ACRES.

All smooth land, fenced all around with three wires and good cedar posts. Good frame house with four rooms, good barn for six head of horses, granary for 4,000 bushels of grain, with drive between, all new. Well and windmill, two fifty barrel tanks. Fine young orchard, 45 acres in alfalfa, 40 acres sown to rye, 160 acres pasture. This land can all be farmed and there is no better land in the country. Telephone in house, and on rural route. This farm can be bought for \$8,500 if taken soon. If you are looking for a number one all round farm, it will pay you to see this.

NORTON LAND CO., Norton, Kans.

Watch Tacoma Grow!

Population, 1900, 37,714

Population, 1906, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamps for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

interests against the fraudulent selling of colored oleomargarine as butter.

The act of 1902 to prevent the false branding of food-products, protecting farmers and other consumers from fraudulent imitations.

NEGATIVE INFLUENCE OF THE GRANGE POTENT.

Not only in securing good laws was Grange influence potent, but in preventing the enactment of laws that would have been detrimental to public welfare. The preventing of the extension of many patents beyond a reasonable limit has saved millions of dollars to the people in the lowering of the prices of articles in common use, the patents of which would have been extended.

It was instrumental in the defeat of the ship subsidy bill, and in preventing the ratification of reciprocity treaties, that were manifestly unfair to the American farmer.

In the reports of the United States Circuit Courts will be found the record of Grange influence in defeating the pretended claims for royalties on slide gates and driven wells. In the reports of the Supreme Court of the United States will be found that important decision establishing and affirming the right of legislative supervision and control by Congress in Interstate commerce and legislative supervision of all corporations.

Substantially, every State in the Union has evidence of Grange thought and influence in equitable laws passed

(Continued on page 204.)

THE KANSAS FARMER

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),

Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.

Mention Kansas Farmer when you write.

MARCH 20 CHEAP WHEAT LANDS MARCH 20

In GOVE, SHERIDAN, and LOGAN COUNTIES at \$4 to \$20 PER ACRE.

Enough rainfall already this season to warrant crop; by Campbell system last season No. 2 hard wheat ran 25 to 50 bushels to the acre, one field 400 acres sod corn averaged 25 bushels to the acre and sold at Granfield for 40 cts. per bushel. Living expenses light, taxes low, plenty fine water, in healthy country and good neighbors. If you want a cheap farm in growing and prosperous country come with us on March 20 and let us show you this land. Last Cheap Excursion this year March 20—\$10 Round Trip.

\$10 Eastman & Lakin, 115 West Sixth Ave., Topeka

\$10

Western Kansas Wheat Farms

Deal with the owner direct. Save commissions. Know you are getting your land at the right figure. We own and control 60,000 acres of the finest wheat and corn lands in central and western Kansas. We have one price for everybody. You can buy a farm on ten years' time with interest at 6 per cent, or you can pay cash and get 5 per cent discount. Our farms are bargains, every one of them, and are in the best counties of Northwestern Kansas; close to schools, railroads, towns and churches, in well settled localities. If you have \$300, you can own a farm and home of your own. No poor land.

The Grain Belt Realty Company, Concordia, Kansas

FARMS THAT PAY 25% TO 50%

in southeastern Kansas, 113 miles south of Kansas City, only 30 miles west of Missouri, in the rich limestone soils where

EVERYTHING GROWS LARGE

Prices lower than for fertile improved farms anywhere in the corn belt, where every tame grass grows rank. The great Premium Corn grows here. SEND FOR PRICE LIST. No trades. 40, 60, 100, 160 and larger.

THOS. D. HUBBARD, Kimball, Kan.

WE GIVE YOU TEN YEARS TIME

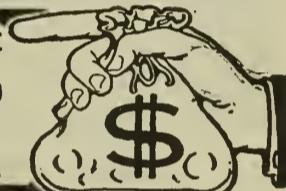
In which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices. Write for full information. FREE.

THE UNION PACIFIC LAND CO.,

Department F. Omaha, Nebraska.



Wheat field on farm of Samuel Cox, Radison, Sask.

BUY A CANADA WHEAT FARM

MORE THAN ONE HUNDRED THOUSAND AMERICAN FARMERS

are going to Western Canada this year. THE GOLDEN GRAIN BELT of the world. Twenty-two years without a crop failure. We offer you from which you can MAKE YOUR OWN SELECTIONS

THE ENTIRE CANADIAN NORTHERN RY. LAND GRANT

located in
THE FAMOUS SASKATCHEWAN VALLEY
THE CARROT RIVER VALLEY AND THE GREAT SASKATCHEWAN PLAINS

At From \$8 to \$10 an Acre

Rich, Virgin Prairie, Deep Loam Soil, Clay Sub-Soil well adapted to diversified farming. This is the best undeveloped prairie land on the continent, and the greatest Hard Wheat District in the world. Write for free maps, pamphlets, etc. Mention this paper and we will send you a copy of our 1906 "Bread Basket."

SASKATCHEWAN VALLEY & ALBERTA LAND CO. Ltd.

LARGEST LAND COMPANY IN THE WORLD

Head Office: Canadian Northern Building. A. D. DAVIDSON, Pres. A. R. DAVIDSON, Vice-Pres. A. D. McRAE, Sec'y-Treas.

WINNIPEG, CANADA

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Home-seekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines

represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

Thirty-One Styles of Farm Fencing

Sold direct to consumers on thirty days trial at wholesale prices.

Catalogue free.

THE FARMERS' FENCING CO.

Melvern, Kansas.



FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK TREES best by test—78 years. We WANT MORE SALESMEN PAY Weekly. Stark Nursery, Louisiana, Mo.; Huntsville, Ala.

TREES THAT ARE CHEAP in price and of the best quality, free from disease and tree blemishes. Com-

plete information. J. H. Black, Box 250, and catalogue free. Freight paid on \$10 orders. FAIRBURY NURSERIES, Box L. Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES. Small Fruits and Evergreens, Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEEDS That will Grow **PLANTS** Note better, even at the high prices. Special bargains. SEEDS, 10 pts. Annual Flowers, 10c; 6 pks. Vegetables, 10c. PLANTS, 6 Roots, 25c. Geraniums, 25c; 6 Begonias, 25c; 4 Petunias, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Peacock free. A. C. Anderson, Columbus, Nebraska.

BARGAINS IN SEEDS Choice kinds of Vegetable and Flower Seeds at 2 cents per Packet. Flower Plants, 5 cents each. Many choice novelties. Don't buy until you see our New Catalogue. Mailed FREE if you mention this paper. IOWA SEED CO., DES MOINES, IOWA.

SEED CORN Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States. J. C. ANDRAS, Jr. Manchester, Illinoia

50¢ IN SEEDS FREE Write for our new, beautiful catalog of high grade seeds. Enclose five 2c stamps or a dime for mailing bush. We send free due bill for 50¢ worth of seeds, packet of seeds and handsome rose bush. Do it today. A. A. Berry Seed Co., Clarinda, Iowa. Box 37.

HARDY EVERGREENS We grow them by the million. To grow them are healthy and vigorous we offer 12 species and three 3 years old FREE to property owners. Mailing expense 6c, whether send or not. A postcard will bring them. Catalog with 43 colored plates of Hardy Fruits etc., free. Write today. The Gardner Nursery Company, Box 740, Osage, Ia.

Trees, Plants & Seeds THAT GROW Best quality. Good bearers. Low prices. Apple 4c; Pin and Cherry 12c; Peach 4c; all budded; Concord Grapes 2c; Forest Tree Seed 10c; up. **GERMAN NURSERIES**, Carl Sondererger, Prop. Tested seeds. Freight paid on trees. Catalogue, English or German, free. Write for it today. Address GERMAN NURSERIES, Box 9, Beatrice, Neb.

Iowa Produces the Best **SEED CORN** and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 34, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO. St. Louis, Mo.

GOOD SEEDS CHEAP BEST EVER GROWN. A wonderful big catalog FULL of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds.

Big Lot of Extra Packages Free to Every Customer. Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

SAVE ON TREES 40% Buy direct from us at Wholesale Prices and save the agent's commission. Our trees and bush fruits are all selected from the choicest stock and especially adapted to the soils and climate of Kansas, Missouri and the Southwest. Our direct railroad communication with all points of this section enables us to deliver all stock promptly and in the best of condition. We offer liberal discounts and guarantee all stock true to name. Write now for wholesale price list.

Wichita Nursery, Box E, Wichita, Kan.

Buy direct from us at Wholesale Prices and save the agent's commission. Our trees and bush fruits are all selected from the choicest stock and especially adapted to the soils and climate of Kansas, Missouri and the Southwest. Our direct railroad communication with all points of this section enables us to deliver all stock promptly and in the best of condition. We offer liberal discounts and guarantee all stock true to name. Write now for wholesale price list.

Wichita Nursery, Box E, Wichita, Kan.

Horticulture

The Gentle Art of Gardening. A. T. DANIELS, TOPEKA, KANS., BEFORE THE WEST SIDE FORESTRY CLUB.

It is a very interesting thing to study the growth and development of a city or a State or a Nation; and it is, or should be, a much more interesting thing to be able to take some part in promoting that growth in such a way that it shall be towards the attainment of the best results. Such a part in this work for the betterment and refinement of this community is the work of the West Side Forestry Club.

I take it that the aims of the Forestry Club are not so much to teach the rules and practice of the art of forestry, as to create and help to grow in this community a knowledge of and an interest in trees and shrubs and things that grow out of doors.

I am in full sympathy with the work of this club, and I am sure that the example and influence of such an organization as this can not fail to be of great value in building up our city to be a beautiful and wholesome place in which to live.

In our own city, full of fine public buildings and beautiful private residences with artistic furnishings and evidences of refinement, taste, and culture, we seem only just to be coming into that period of our civilization which finds one expression of its refined taste in the symmetrical, appropriate, and pleasant surroundings of a beautiful building. As Lord Bacon said in his quaint "Garden Essay," "As ages grow in civility and elegance, men come to build well sooner than to garden finely, as if gardening were the greater perfection."

I have no doubt that in the work which you have done among your friends and neighbors, to enlist their sympathy and cooperation in beautifying their parks and lawns and in planting trees and shrubs, you have found that most people are also in sympathy with your work. Every one enjoys the shade or fruit of a tree and the fragrance and beauty of a flower, even if they have never tasted the joys of planting or caring for a garden. The work that may be done by those who have the true gardener's spirit is to imbue their neighbors and friends with an enthusiasm that shall lead them to turn some attention, time, and effort to planting and cultivating something to grow out of the ground; not only to stimulate a love for the beautiful things of nature, but to a practical realization of the pleasure that comes from a more intimate knowledge of and acquaintance with out-door life.

INFLUENCE OF GARDENING.

The love of nature, the reverence for the forest and the groves that were God's first temples, and the appreciation of the beauty and usefulness of a stately tree or a graceful flower, are all attributes of character that are worthy of cultivation in every person. The influences of a taste for things out of doors are gentle and refining and inculcate a quiet, friendly, charitable spirit.

Gardening is a generous art and prompts unselfishness. A good gardener is a good neighbor and a good neighbor is a good citizen. Gardens have been associated with the finer and tenderer feelings of our natures ever since the days of Adam; and in all the ages, every period of peace and enlightenment has been characterized by the planting and care of gardens—as if it were natural for us to return to the original occupation of man.

In the bustle and hurry of modern life much of our natural inclination is repressed, but there is still in the hearts of most of us a tender feeling for a garden and what grows therein, and a hope that some day we may really have a garden and participate in the joy that comes from digging in the ground and from watching the unfolding of leaf and bud and flower, and the ripening of fruit.

Almost all civilized people are born with a love for flowers and trees and a garden. A garden, even though it be small, is closely associated with our idea of home; and the people who have been foremost in pioneer life in these United States, those whose work has been of permanent value in laying the foundations of good government, have been people who have recognized and appreciated the value of the home and its influence for good in the community, and whether they were Puritans in New England, Cavaliers in the sunny South, or Dutch along the Mohawk or the Hudson; or in later years, if they

were of those who settled in the forests of the Central States or on the Western prairies, they were people who came from homes whose influences have been and still are mighty forces for good in making new homes in new lands.

PIONEER GARDENING.

The work of these pioneers, however, was hard. It was to subdue the land and to prepare the soil to produce a living; towns and roads were to be built; schools and churches must be established; and all the necessities and comforts of life provided for. One of the first things to be done was to plant a garden, and the garden was a prominent and essential feature of the new home. Not only for its welcome addition to the daily fare, but the garden furnished almost the only means of recreation and decoration. Plants and flower-seeds were often brought from the old home with a few roots or cuttings or scions from a favorite tree or shrub, so that their first fruits and flowers helped to keep fresh the recollection of the old home.

A home implies a family, and a family implies something besides the daily work, the daily eating and sleeping. Where there is a family, there is always something necessary as a diversion or recreation to vary the monotony of the daily toil and the routine of living, and to make the home attractive; something that helps to keep all the members of the family interested; something the memory of which will last long after the toil and hardship of daily work are forgotten.

In those earlier days, too, when it was a hardship to travel, people were kept at home, and were compelled by the conditions under which they lived to find their recreation and diversion there. Thus it was that the garden came to be very closely associated with home life, and that we, the descendants of those people, have inherited a love for the trees and the grass and the flowers.

SOME NOTED GARDENS.

Some of the gardens of those early days were quite extensive and elaborate, planted with many trees and shrubs imported from English nurseries, strangely overlooking many of our native trees much better suited to their purpose. One of the first, planted largely with native trees and plants, was that established about two hundred years ago by John Bartram on the banks of the Susquehanna in Philadelphia. There were no express companies nor rural deliveries in those days, and John Bartram collected his specimens from the forests and mountains and swamps from the Alleghanies to the coast and from New York to the Dismal Swamps and even to Florida; and when we know that all these journeys were made on foot or horseback, carrying the trees and plants, we can know that he was such a lover of the trees that it is indeed worthy of his memory that the city of Philadelphia should do as it has done—set apart his garden forever as a public park.

GEORGE WASHINGTON'S GARDEN.

Probably the most widely celebrated of the gardens of years ago is that which was planted at Mt. Vernon by George Washington, and which is still preserved much as he left it, and is one of the most interesting features of that historic spot. There are here many fine specimens of trees of different species. Especially attractive are the formal beds of old-fashioned flowers, bordered with low hedges of box in a style much used in those days.

There are many gardens in the older sections of our country, that are still preserved with a fine reverence for their many charms and old associations. A very interesting book on the old-fashioned flowers and flower lore of these old gardens is by Mrs. Alice Morse Earle, entitled "Old Time Gardens."

At the present time the wholesome lesson of decorative gardening are appreciated more than ever before, not only by individuals on their home grounds, but by municipalities in public parks and streets, and by corporations and companies who know the cash value as well as the aesthetic importance of improved surroundings.

Railroad yards and grounds are adorned with plants, shrubs, beds of flowers and smooth lawns. The demand for plants has been greater than the supply, and the inquiries for more information on garden topics all indicate the popular taste. Henry Ward Beecher said thirty years ago, that it is a sign of health and wisdom when men love pleasures and enjoyments that do not rush and roar, but distill as the dew.

Of public gardens or parks the one best known is probably Central Park of New York. Although some planting

HEALTHY TREES Honest in quality. Grafted Apples, Budded Peaches, Concord Grapes, 15c each; good varieties. Ripe Mulberry, \$1 per 100. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.

TREES Small Fruits & Nursery Stock DIRECT FROM THE NURSERY. At Wholesale Prices. You get what you order, and save half your money. Lists Free. JOHN F. DAYTON WAUKON, IOWA

Most Extensive Grower of **Grape Vines** In America. Intro-**CAMPBELL'S EARLY**, - The Best Grape ducer-**JOSSELYN**, - The Best Gooseberry of PAY, - - - The Best Currant Small Fruits. Catalogue Free. GEO. S. JOSSELYN, Fredonia, N. Y.

World's Premium Seed Corn, HOWARD COUNTY WHITE

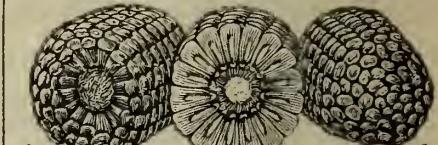
Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

SEED POTATOES RED RIVER GROWN

Best pure stock—large smooth seed potatoes of all leading and best varieties of both early and late sorts, including Early Ohios, Early Rose, Early Six Weeks and other kinds, at 9c to \$1.00 per bushel. Quick shipments and low freight rates. Big, fine illustrated catalog of all farm, grass and garden seeds with full descriptions and prices sent FREE if you mention this paper. Write to-day to RATEKINS SEED HOUSE, Shenandoah, Iowa

50 BULBS 25 Cents. Will grow in the house or out of doors. Hyacinths, Tulips, Gladiolus, Fuchsias, Oxalis, Tulipos, Begonias, Jonquils, Daffodils, Chrysanthemum, Lily, Daffy Lily, Gloriosa, Lilies of the Valley—all postpaid, 25c. In stamps or coin. ASA premium with these 50 bulbs we will send FREE a big collection of flowerseeds—over 200 kinds. HILLSIDE NURSERY, SOMERVILLE, MASS.



SEED CORN

There are many points to be considered in selecting seed corn; some of the most important are outlined in the above cuts; namely, well filled out at butt end with small to medium sized shank; the tip of ear well capped or covered over with fair sized grains; the kernels should be wedge shaped from cap to where it rounds off at point or germ end, and the rows should be close together but still not so tight as to smother the germ and cause mould. The grain must be deep and set on a small cob which is of such texture that it will dry out easily and quickly. These points are all brought the nearest to perfection in the new

GOLDEN WEST It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue illustrating and describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seeds. Mailed free if you mention this paper.

JOHN SEED CO., DES MOINES, IA.

FERRY'S SEEDS Represent the survival of the fittest. We have become the largest seed house in the world because our seeds are better than others. Do you wish to grow the most beautiful flowers and the finest vegetables? Plant the bestseeds—Ferry's. 1906 Seed Annual free to all applicants.

D. M. FERRY & CO., Detroit, Mich.

GOLDEN YELLOW CALLA LILY, 5 Bulbs. 50 KINDS FLOWERS SEEDS 10c. Asters, Balsam, Canna, Colchicum, Nasturtium, Morning Glory, Pansy, Larkspur, Jobs Tears, Poppy, Golden Glow, Snapdragons, Cosmos, Pink, Zinnia, Verbena, Monkey Plant, Sweet Rocket, Primrose, Ice Plant, Petunia, Castor Oil Beans, Portulaca, Candytuft, Sweet Peas. **5 CHAMPION BULBS.** The Summer Hyacinth, Golden Lily, Hinnomaki, Bird, Gladiolus, Giant Tuberoses, Baby Breath, Oxalis, all this beautiful collection of seeds and bulbs only 10c. in silver or 5 2-c. stamp to pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10 cents. CHARLESTOWN NURSERY, CHARLESTOWN, MASS.

was done in New York about the year 1800, when the city was scarcely larger than Topeka. It may be a surprise to know that it is less than 60 years since work on Central Park was commenced; but we need not be surprised to know that its inception was largely due to that poet of nature, William Cullen Bryant, whose home and garden at Roslyn, Long Island, were among the most beautiful in America.

Shaw's garden at St. Louis is not only the most famous garden in the West, but is one of the most complete collections of trees, shrubs, and plants in America. It has been for many years the Mecca to which all good gardeners have hoped to make a pilgrimage. Here are found almost every tree, shrub and plant that can be made to grow. They are grown in a natural arrangement with sufficient plan to make access convenient, and with sufficient formality to make an orderly and artistic display. All the plants are plainly labeled so that those who wish to study them may do so intelligently.

Any collection of trees or plants is to most people much more interesting and surely more instructive if plainly and carefully labeled.

The Arnold Arboretum near Boston and the new Bronx Park and Arboretum near New York will undoubtedly be the leading public gardens of the East in a few years, as the Golden Gate Park of San Francisco is of the West.

Mr. Downing, one of the first and most charming writers on gardening in the United States, said that a cultivation of taste for rural embellishment could be brought about by individual effort, by the direct work of the nurseryman and by the horticultural societies, and of course, if he were saying it now, he would have included the Forestry Club.

Gardening was defined by Downing as "refined nature assisted by man through a taste for that which is orderly, symmetrical and harmonious in form and color."

MODELS.

A garden may be planted in some informal plan without having the natural disorder of the jungle; the best examples of artistic gardening in this country have little of the formal or mechanical arrangement in laying out and planting beds and walks, that is seen in some of the pictures of French and Italian gardens. It is likely that in America the type of garden that will be most popular and satisfactory, is the English rather than the more formal and expensive styles of the Italian and French.

The English idea of a garden is one of enjoyment and not of formal and expensive show; a garden where one may rest or walk and pluck a flower, where all is quiet and harmonious without extravagance, display or undue expense; a garden, the plan, planting, and management of which shall be liberal in proportion to the purse of the owner, and his ability to care for it. The size of the garden would of course be limited somewhat by the cost of planting and maintenance. Lord Bacon's model garden was to contain thirty acres and, indeed, with all the desirable trees and shrubs and flowers that one would like to have, thirty acres would be none too large if one were not obliged to count the cost.

For the many small or less pretentious residences on small plots of ground which comprise a great majority of Topeka homes, the general advice that may be offered is that the parks and lawns near the house be well hedged and kept in grass, with a few trees not too near the house for shade or ornament. There may be space for a few shrubs or beds of flowers at the side, and especially over the porch a Prairie Queen or Crimson Rambler rose or a Clematis paniculata; and for a rear trellis or screen, a grapevine, a hopvine, or a honeysuckle is a luxuriant and rapid grower. A portion of the rear yard should be given to perennials and annuals for cutting.

If one really enjoys these things, he will plan for them, and the results that come from cultivation of even a small place, will be very gratifying.

The real pleasure that comes to the true gardener is, fortunately, not measured by the size of his garden. One end or a corner of a twenty-five foot lot may be made to produce a wonderful succession of flowers and many a dish of fresh and tender vegetables for the table. Even with no space at all out of doors, a recreation that lasts all the year round, with changes and surprises each week, comes to many a shut-in person from the cultivation and care of a window garden of house plants.

In the smaller towns where the doorways are not cramped for space, I have

been growing evergreens and forest trees for 30 years, in ways with one idea—trees that satisfy. When you buy Hill's trees you get honest value—highest quality. My catalogue is my salesman; it's free, contains 48 pages illustrated with beautiful pictures; descriptions of all kinds of nursery stock for all purposes—hedges, windbreaks and screens. Also fruit trees, shrubs and vines. No best bargains ever offered—\$1.00 to \$100 per 100 Proprietary. Everything first-class, guaranteed exactly as represented. Write for catalog today.

D. HILL, Evergreen Specialist
Dundee, Ill.

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. Blackman, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices.

GARDEN CITY, KANSAS

ALFALFA SEED

F. D. MORRISON.

Kansas Grown. Non-Irrigated.

From grower to consumer. Write for prices.

MEADE, KANSAS

SEEDS

DIRECT TO CONSUMER—LOOK AT THESE PRICES: Red Clover per bu., \$8.50; Alfalfa Seed, per bu., \$8.25; Timothy Seed, per bu., \$1.65; Fancy Kentucky Blue Grass Seed, per bu., \$1.75; Millet, Cane, Kaffir-corn, Every thing for Farm and Garden. Also Poultry Foods, Oyster Shell Grits, Cracked Bone, etc. Seamless bags, 20 cents each. Low prices and choice goods. Write me

T. LEE ADAMS, 417 Walnut St., Kansas City, Mo.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to

KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

HARDY ROSE BUSHES

Live Out Doors, Summer and Winter.

10 ROSE BUSHES \$1.50

- 1 General Jacqueminot (Brilliant Red).
- 1 American Beauty (Red). Beautiful.
- 1 Magna Charta (Pink). Extra.
- 1 Mrs. John Laag (Soft Rose).
- 1 Ulrich Brunner (Cherry Red).
- 1 Pearl des Blancs (White).
- 1 Moss Rose (Beautiful Red).
- 1 Celino Forestier (Yellow). Fine.
- 1 Sweet Brier (Sweet Scented).
- 1 Crimson Rambler (Large, Beautiful, Running Rose).

Ten of the choicest varieties, 3 and 4 years old Rose Bushes, only \$1.50. The regular price for these bushes is seventy-five cents each. This is a great bargain. You will notice that this collection has very choice, beautiful shades. All green, packed in moss. True to name. Do not miss this grand offer.

ORDER QUICK, and get this fine Collection Imported from Holland. These bushes are grafted. They will flower this year.

WAYSIDE NURSERY, Somerville, Mass.

EVERGREENS AND FOREST TREES

I have been growing evergreens and forest trees for 30 years, in ways with one idea—trees that satisfy. When you buy Hill's trees you get honest value—highest quality. My catalogue is my salesman; it's free, contains 48 pages illustrated with beautiful pictures; descriptions of all kinds of nursery stock for all purposes—hedges, windbreaks and screens. Also fruit trees, shrubs and vines. No best bargains ever offered—\$1.00 to \$100 per 100 Proprietary. Everything first-class, guaranteed exactly as represented. Write for catalog today.

D. HILL, Evergreen Specialist
Dundee, Ill.

After 50 Years

we still keep up
the old habit of giving
special directions, when
asked, in addition to those for
raising each variety of vegetable
and flower contained in our
catalogue—sent free.

J. J. H. GREGORY
& SON,
Marblehead,
Mass.



(Continued on Page 297.)

The World's Fair Prize Winning Corn just WON FIRST PREMIUM at the Cora Breed State Show at Manhattan, also first on Farmers' White and second on Boege Co., White. Sam and catalog tells how to raise Corn every year. John D. Ziller, Hlawatha, Kansas.

HE RAISES CORN.

EASTER LILY FOR EASTER SUNDAY

Send 10 Cents

Will send you 1 Easter Lily Bulb, 1 Tuberous, 1 Gladiolus, 1 Cinnamon vine, 1 Oxalis also 100 different kinds of fresh, finest grown seeds, including Pansies, Petunias, Phlox, Aster, Stocks, Sweet Peas, Cosmos, Balsams, Nasturtiums, Morning Glories, Verbenas, Portulaca. This fine collection of seeds and Bulbs for 10c. in Silver or 2c. Stamps. American Seed Co., Malden, Mass.



15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer, that will flower for the next 10 years with plenty of beautiful flowers.

1 Clump Mixed Phlox All Colors, 25c

1 Clump Mixed Hollyhocks 25c

1 Clump Mixed Sweet Williams 25c

1 Clump Mixed Baby Breath 25c

1 Clump Mixed Ragged Robin 25c

1 Clump Mixed Crysanthemum 25c

1 Clump Mixed Dianthus Pinks 25c

1 Clump Mixed Golden Glow 25c

1 Clump Mixed Red Poppy 25c

1 Clump Mixed Bleeding Heart 25c

1 Clump Mixed Coreopsis Harvest Moon 25c

1 Clump Mixed Heuchera 25c

1 Clump Mixed Dahlias 25c

1 Clump Mixed Hardy Asters 25c

1 Clump Mixed Hardy Iris 25c

This entire collection, worth \$5.00, for only \$2.00

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, Malden, Mass.

20 HARDY PLANTS \$5.00

Shrubs and Running Vines

1 Syringa (Lilac)

1 Japan Snowball

1 Double Althaea

1 Double Flower Almond

1 Hardy Hydrangea, 4 ft.

1 Syringa Mock Orange

1 Phlox Purple Fringe

1 Forsythia Beautiful

1 Lilac, white and purple

1 Deutzia

1 Bridal Veil

1 Boston Ivy

20 Hardy Plants from 4 to 5 ft. tall. This entire collection, only \$5.00. Send your order early and we will send this fine collection, worth twenty-five dollars, enough plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.

NATIONAL PLANT CO., Somerville, Mass.



42 Plants \$2.50

10 Currant Bushes 10 Gooseberry Bushes

10 Raspberry Bushes 10 Blackberry Bushes

1 Concord Grape Vine 1 Niagara Grape Vine

Greatest Bargain yet. 42 plants, all green, ready to bear fruit, for only \$2.50. Every one should have these lovely fruits growing in their garden. Now is your chance. Order early, and be sure of them.

BAYSTATE PLANT CO., Boston, Mass.

POULTRY BREEDERS' DIRECTORY.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners; 15 for \$2; from flock, 100 for \$5. W. C. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

CHICK-O for baby chicks; a complete, balanced ration. Ask your dealer or write, D. O. Coe, Topeka.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on eck. last three years at Harvey county poultry show. Eggs from pen \$2, 120 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 for \$3.50. H. F. Brueggemann, Route 2, Herington, Kansas.

PURE BRED White Wyandotte eggs for sale; \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94% points. Write for prices. A. F. Hudley, Maple Hill, Kansas.

FINE BLACK LANGSHANS started from \$3.00 eggs. Fifteen eggs for 50 cents. Minnie D. Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—from main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. G. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

FOR SALE—Silver Laced Wyandottes, White Plymouth Rocks and Partridge Cochins. Fine stock, each raised on a separate ranch. Eggs, per sitting of 15, \$1. Letters promptly answered. Address W. C. Koenig, Nortonville, Kan., First Nat'l Bank Bldg.

BARRED ROCK EGGS, \$8 per 100. Mrs. R. A. Galbraith, White City, Kansas.

BUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmans, M. B. turkeys, and Toulouse geese. From prize-winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovette, Proprietor, Mullinville, Kansas.

R. C. RHODE ISLAND RED EGGS—Farm range, \$1.00 per 16; pen, \$2.00 per 16. I. W. Pulton, Medora, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bestwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs, \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

S. C. B. LEGHORNS, 15 pure-bred cockerels, \$1.00 each. Eggs for sale. I took first at State Poultry Show. Mrs. Slier Seal, Meriden, Kansas.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and Brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeders of choicest birds. Eggs \$1.50 per 15. Member American White, P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each. I bred buy a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males. Eggs \$1 per 15; \$5 per 100. A. C. Raft, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Ks.

PURE single comb brown leghorn eggs: 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

BLACK LANGSHANS—Hens scoring 93 and upwards—headed by 3d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kans.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kansas.

M. Y. R. I. REDS won seven prizes on eight entries at Kansas City. Circular. H. C. Kellerman, 3516 Smart Ave., Kansas City, Mo.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

PURE-BRED Barred Plymouth Rocks at reasonable prices. J. A. Sawhill, Edgerton, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

FOR SALE—Young M. B. turkey toms from high-scoring, prize-winning stock. Boo! your orders now and secure early eggs for hatching. \$2 per 15. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas, \$1 per 15. Vira Bailey, Kinsley, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

MAMMOTH BRONZE GOBBLERS—Extra nice young toms, \$5 each. Buy one to improve your flock. C. E. Durand plantation, Hutchinson, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 16 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$8.

The Poultry Yard

Roup.

EDITOR KANSAS FARMER:—J. E. Harbaugh states in the KANSAS FARMER of February 8, that his turkeys are affected with swelling in the head. I have learned by reading agricultural papers that this disease is called roup. My remedy is a success on chickens, and certainly will not fail on turkeys. Take a sharp knife and cut right into the swelling and take out the lump of matter found in a sack next to the eye-ball. If there is any substance formed back in the roof of the mouth, closing the holes of the nose, cut it off with the knife. The nose may be closed on the outside. I never apply anything after the operation. One application of carbolated ointment may be good. I have seen chicken's eyeballs pushed out by the enlargement of the lump. This is a sure remedy and easily performed. BEN HAMPTON.

Poultry Notes.

The hatching season is now on and complaints will soon be made that the eggs are infertile and will not hatch. One great cause of the infertility of eggs in the early season is that the hens are too fat, but after they lose some of their flesh by laying, the eggs will become fertile. The remedy is not to feed so highly but make the hens scratch for their feed.

We are of the opinion that in feeding young chicks the dry-food system is much better than the old-time, sloppy-food system. For the first two weeks feed pin-head oatmeal, millet and cracked wheat. After that time, whole wheat and Kafir-corn with cracked corn given occasionally, will make them thrive. See that the chicks always have plenty of grit or oyster-shells with occasionally some meat-scrap. Pure water should always be provided for them.

Fowls are quite likely to contract disease in the spring by allowing them to gorge themselves on grass and green plants, after having been closely confined all winter. They should be allowed to forage in early spring by remaining outside only a short time at first, which can be gradually increased as they become accustomed to it. At first they should run just a few moments before dark, giving them their liberty, turning them out a little earlier each evening. Internal fever, diarrhea, and sometimes chicken cholera are induced by allowing fowls to eat too much green food at one time in spring, before they have gradually become accustomed to it.

How to Use an Incubator.

We reprint the following from the Successful Poultry Journal, from the pen of Milton O. Adams, Hiawatha, Kansas:

The successful manipulation of an incubator is no difficult task. Any one with common sense can operate one; it's just the same as running any other machine, minus the manual labor, and an abundance of scientific knowledge. Incubators as built to-day, are so nearly automatic in operation, that a watchful eye, attentive to minor details, will insure success. I take it for granted that you have hatchable eggs.

While speaking of the minor details of incubator operation, perhaps it would be well for us to go over the ground together, and enumerate them. There are several little things, seemingly, that close observation brings to our attention. To begin with, there is the lamp. Incubator lamps are simple, common, every-day house lamps, of the best sort, though; there is nothing mysterious about them, and they are much safer than other coal-oil lamps. Be careful, though, to see that only the best quality of oil is used, and that the wick is regularly trimmed, daily. Cheap oil is the foundation of most burner troubles. Good oil goes further, burns more steadily, and throws off less obnoxious gas. Wicks cost but little, so use a new one each hatch, and, always keep the mica clean, so that you have no difficulty in seeing the flame. It's almost needless to remind you of the necessity of keeping the heater free of soot, should poor oil cause it to collect.

Incubator regulators are just about perfection, relieving the operator of a great deal of worry and care. But they must be properly adjusted in order to perform the duty they were designed for. A good thermostat will maintain an even temperature with scientific

POULTRY BREEDERS' DIRECTORY.

CHOICE B. P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emu, guinea fowl, \$2.00 each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Nutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Avenue, Topeka, Kansas.

FOR SALE—Choice S. C. B. Leghorn cockerels, \$1 each. J. N. Sheldon, Route 1, McPherson, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93% to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

BARRED ROCKS EXCLUSIVELY—Leffel strain. Large, heavy-boned, fine, clear; Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards, John D. Ziller, Hiawatha, Kansas.

LOOK HERE—TRY me on the big-boned Black Langshans, scoring from 90 to 95%. Charles Leeper, Harper, Kansas.

WHITE WYANDOTTE COCKERELS (Stay White), \$1 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show. O. C. Sechrist, Meriden, Kansas.

Mammoth Bronze Turkeys

FOR SALE—Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kansas.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver.

Blue Mound, Kansas.

Eggs for Hatching

M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

Rose Comb Brown Leghorns

EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots. P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READINESS

Farm stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 96, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention KANSAS FARMER when writing.

Buff Orpingtons

S. C. Pure Bred, Cook Strain

Eggs for setting, \$2 per 15. Order now. My stock is from Wm. Cook & Sons, originators.

V. V. TURNER, - Sabetha, Kansas

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hen, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas

Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. J. MILLER, Breeder.

Stock for sale. Fifteen eggs for \$2. Address

546 Missouri St., - LAWRENCE, KANS

ORPINGTONS

Big Buff Busters—Winners and descendants of the best stock in the U. S. Exhibition eggs, \$3.50 for 15; \$5 for 30. Infertile eggs replaced. Utility eggs, \$1.50 for 15; \$3.50 for 45; \$5 per 100; 25 utility cockerels, \$1 each.

S. C. BUFF LEGHORNS

Best Color, Shape and Style in the West.

Exhibition eggs, \$2 for 15; \$3 for 30. Infertile eggs replaced. Utility eggs, \$1 for 15; \$2.50 for 45; \$5 for 125.

Cockerels scored by Rhodes.—\$5 to \$10; 25 utility cockerels \$1 each.

W. H. MAXWELL, 1220 QUINCY STREET, TOPEKA, KANS.

All stock line bred and farm raised.

When writing our advertisers mention this paper.

POULTRY BREEDERS' DIRECTORY.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—Fine stock; farm raised. Price, \$1 for 15; special price by the hundred. Shipped by express, carefully packed, anywhere. Mrs. O. E. Walker, Route 8, Topeka, Kans.

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet. Young cockerels for sale. Eggs, \$1.50 to \$2.50 per 15, for 15, from high-scoring pens.

R. B. Steele, Sta. B. Topeka, Kans.



Mark Them

If you will separate the young chicks, and to one lot feed Dr. Hess Poultry Pan-a-ce-a regularly as directed, you will find that they will make a remarkable gain in growth over a similar number that do not receive the Pan-a-ce-a, and besides the Pan-a-ce-a will prevent loss from disease. Dr. Hess Poultry Pan-a-ce-a cures gapes, choicera, roup, indigestion, leg weakness and all poultry diseases due to digestive troubles or infection. Poultry Pan-a-ce-a positively destroys the germs of disease, besides increasing the digestive powers so that the maximum amount of the food is converted into bone, muscle, feathers, eggs.

DR. HESS Poultry PAN-A-CE-A

is the prescription of Dr. Hess (M. D., D. V. S.) and makes the young grow fast, healthy and strong. It has the endorsement of leading poultry associations in the United States and Canada. Costs but a penny a day for about 30 fowls and is sold on a written guarantee. Destroy poultry lice by sprinkling your hens and nests with Instant Louse Killer; it is also a reliable disinfectant and deodorizer.

13 lbs. 25c., mail or express, 40c.
5 lbs. 60c.
12 lbs. \$1.25.
25 lbs. \$2.50.

Except in Canada and extreme West and South.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK,
Ashland, Ohio.
Instant Louse Killer Kills Lice.



METAL MOTHERS

Complete fire-proof batching and brooding plant for \$7.50. 2 qts. oil hatches 50 eggs and raises chicks. Catalog free. CYCLE HATCHER CO., Box 297, Salem, New York.



Good Hatches Promised

It's a pleasure to hatch lots of chicks in a HATCH-ALL INCUBATOR. Pure air, even heat, little care, simple directions make it easy for beginners or those experienced to make money on poultry. Write for free catalog to HEBRON INCUBATOR CO., Box 18, Hebron, Neb.

Our Money-Back Guarantee

Every incubator we sell absolutely money-back-guaranteed to do all we claim. The 1906 Reliable is the only incubator with double heating system. Free catalog tells all about it. Pure-bred Poultry and Eggs for hatching. Ask for prices.

Reliable Incubator & Brooder Co., Box B-62 Quincy, Ill., U.S.A.



We Pay the Freight

East of the Rockies.

Here's an offer never before equalled. The famous Royal Incubator

sold on trial, freight prepaid. Guaranteed in every way. Automatic control of heat and ventilation. Perfect batches assured. Doubles your poultry profits. Don't pay more for smaller and poorer incubators. Get the best at freight-paid bargain prices. Investigate before you buy. Blue catalog of incubators, brooders, poultry and all supplies free. "Proper Care and Feeding of Chicks," 100. Six postpaid paper one year, 10c. Royal Incubator Co., Dewart 66, Des Moines, Ia.



There is nothing in the world like it. It contains 224 large pages, handsomely illustrated. A number of most beautiful colored plates of fowls true to life. It tells all about kinds of Thoroughbred Fowls and their life-habits, illustrations and views of same. It tells how to raise poultry successfully and how to treat all diseases common among them. It gives working plans and illustrations of convenient Poultry Houses. It tells all about

Incubators and Brooders.

It gives full instructions for operating all kinds of incubators. This chapter is marvelously complete and worth dollars to anyone using an incubator. It gives descriptions and prices of incubators, brooders and all kinds of poultry supplies. In fact, it is an encyclopedic of chickendom and will be mailed to anyone on receipt of only 10 cents. Your money returned if not pleased.

S. B. SHOEMAKER, Des Moines, Iowa.

precision when properly set. Too many operators, beginners especially, are in such a hurry to get the incubator at work, that sufficient time is not given to adjusting the regulator. It is best to see that everything works nicely, and that the machine will hold the proper temperature, and to run it without eggs, for a few days, than to start the machine setting, before you can keep a uniform heat. Be sure that the connections are properly fitted, and that the lever is carefully adjusted according to directions accompanying the machine. The damper must fit down evenly over the flue, or bend the connection so that it does. When you have everything about the regulator working smoothly, turn your attention to the thermometer, and locate it in your machine as per your instructions.

It is understood that you have picked out a desirable location for the machine to begin with. As to whether your machine should be operated in a cellar, or above ground, follow the advice of the maker of your machine, but all times look well to the ventilation of the room. Foul air is conducted right into the machine, and can not help but work to the detriment of the forthcoming hatch.

While there is a difference of opinion among incubator manufacturers as to the wisdom of testing the eggs, rest assured that it can do no harm. Beginners, especially, can learn a great deal relative to the theory of incubation by studying the embryo chick, and its wonderful development. It is not my purpose to advise anything contrary to the directions of the man who made your machine, but there are so many little, seemingly unimportant details, that are too often slighted, to the detriment of the hatch, that it is well to keep ever fresh in your memory the absolute necessity of attention to details.

While incubators hatch as large a per cent of the eggs as the average hen does, yet a machine not coming quite up to this average is even more profitable than hatching with hens. Many times it requires as much time and care to attend to a single hen covering but thirteen eggs, as it does to properly operate an incubator containing from fifty to four hundred. Figuring your time, and feed bills, when using hens, against the oil and time for operating an incubator, shows a handsome saving favorable to the incubator.

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of the Kansas Farmer. Kindly give the age, color, and sex of the animals, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should he signed with full name and should he addressed to the Veterinary Department of the Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in the Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Bog Spavin and Thoroughpin.—My 2-year-old mare colt has what I think is a bog spavin and thoroughpin; it is a soft hunch at the hock joint on both sides and on the front. It has had it thirteen months, but does not seem lame from it. I used a spavin cure on it at first, but it did not seem to be reduced any. Is there anything to remove the bunch? If not, will it make her lame to work her? A. F. J.

Morganville, Kan.

Answer.—A stimulating liniment containing considerable iodine in the form of the tincture, applied to your colt's bog spavin and rubbed in thoroughly will do more to reduce the enlargement than anything else I can recommend. The following makes a very good liniment: Sulphuric ether, 6 ounces; oil of turpentine, 3 ounces; tincture of iodine, 4 ounces; compound soap liniment, 1 pint. Shake well before using; apply once daily until sore, then withhold for a few days and begin again.

Palpus Worm.—I have two mares that have been sick all winter. I have tried several kinds of medicine that have done no good. They get stupid but do not wobble. Some say it is malarial fever. Can you send me a bulletin giving remedy for same? Weir, Kan.

Answer.—We are sending you a press bulletin which we think will describe the condition of your animal. If it

DON'T SEND EAST for your Single Comb Brown Leghorns. In four shows this season I have won 15 out of 19 blue ribbons competed for and in three of these shows have had highest scoring bird in the show. Scores as high as 35½ by Owen and Atherton and 94½ by Rhodes. Stock for sale. Eggs, \$1 for 13; \$5 for 100.

CHAS. C. SMITH, Manhattan, Kansas.

BIG PROFITS in Farm Poultry
Standard Cyphers Incubator

"the sensation of the poultry world;" guaranteed to hatch more and healthier chicks with less loss than any other or your money back. We mean it. 90 days trial. Complete Catalogue and Poultry Guide, 228 pages, (xxl) Free if you mention this paper and give addresses of two near by poultry raisers. Write nearest office.

CYPHERS INCUBATOR CO., Buffalo, Boston, Chicago, New York, Kansas City or San Francisco.



\$7.00 Freight Prepaid, 120 EGG Incubator Ever Made.
\$4.50 Buys the Best 100-Chick Brooder.
Both Incubator and Brooder, if ordered together, cost but \$11.00. Double cases all over; best copper tank; hot water; self regulating; satisfaction guaranteed. Our book, "Hatching Facts," tells all about it. Mailed free. Write for it.

Belle City Incubator Company, Box 18, Racine, Wisconsin.

ON CREDIT.

The Celebrated Century Incubators. Cash or easy monthly payments. We trust honest people living in all parts of the world. The first hatch pays for the Incubator, gives you large profits besides. Write for free catalogue of Incubators and Brooders.

CENTURY MFG. CO.

EAST ST. LOUIS, ILL.

Dept. 531



The "QUEEN" is not an incubator but the Incubator

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

fails to meet the requirements in your case, kindly write us again and we will give you additional information if possible.

The Palisade Worm.—Please give me some information about long, wire-like worms found on the outside of the intestines of a horse that died with what was supposed to be blind staggers. I could find nothing wrong with the horse, except for these long worms, and bots in the stomach; should judge that there were about 1,000 bots. Will bots cause the stomach to stop acting? The horse was sick only 9 hours, and reared and fought until he fell, and was held down, and then sweat until he died. I would like to know if the worms were the cause of death? Many horses have died in this neighborhood with this disease. D. B. R.

Seward, Kan.

Answer.—We are mailing you a press bulletin on the palisade worm, that was evidently the cause of the death of your horse. Bots oftentimes causes stopping of the stomach; whether it caused the trouble with your animal or not I am unable to state.

Swelling on Hock Joint.—My 3-year-old filly got kicked or, hock joint February 8. I have been using a liniment of vinegar, turpentine, and lard, but this does not relieve the swelling. She is not lame. What can I do to remove the swelling? I also have a black mare that is always rubbing when in the stable or lot. I can find no lice, but there is a scab in the hair next to the skin, and she is falling off in flesh.

Holton, Kan. O. B.

Answer.—We would advise using lime and sulfur dip in the proportions of 8 pounds of lime and 24 of sulfur to 100 gallons of water. Put the lime and sulfur together and add sufficient water to get as much of the sulfur into solution as possible; allow it to stand for 48 hours, dip off the surface liquid and add sufficient water to make 100 gallons. The dip should be applied as hot as the animal can stand. It will not be necessary to make up this entire formula but use it in the proportion indicated.

Pallus Worm.—I have two mares that have been sick all winter. I have tried several kinds of medicine that have done no good. They get stupid but do not wobble. Some say it is malarial fever. Can you send me a bulletin giving remedy for same?

Weir, Kan. F. N. D.

Answer.—We are sending you a press bulletin which we think will describe the condition of your animal. If it

POULTRY FEEDING AND FATTENING

A handbook for poultry keepers on the standard and improved methods of feeding and marketing all kinds of poultry.

The subject of feeding and fattening poultry is prepared largely from the side of the best practice and experience here and abroad, although the underlying science of feeding is explained as fully as needful. The subject covers all branches, including chickens, broilers, capons, turkeys and waterfowl; how to feed under various conditions and for different purposes. The whole subject of capons and caponizing is treated in detail. A great mass of practical information and experience not readily obtainable elsewhere is given, with full and explicit directions for fattening and preparing for market. The broad scope of the book is shown in the following

TABLE OF CONTENTS

Thrifty Growth, Expert Chicken Feeding, Broiler Raising, Nutrition for Layers, Special Foods, To Finish and Dress Capons, The Art of Poultry Fattening, Lessons from Foreign Experts, American Fattening Methods, At Killing Time, Preparing for Market, Marketing Turkeys and Waterfowl, Finish and Shaping.

Profusely illustrated, 160 pages, 5x7-1/2 inches, cloth. Price 50 cents postpaid.

Kansas Farmer Company

Topeka, Kansas

DO YOU WANT

GOOD READING

?

The yearly subscription price of the following magazines is as follows:

Review of Reviews	\$3.00
The Cosmopolitan	1.00
Woman's Home Companion	1.00
Kansas Farmer	1.00

Total \$16.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

KANSAS FARMER CO.,
TOPEKA, KANSAS.

When writing advertisers please mention this paper.

Dairy Interests

Making Skim-Milk Paint.

Of all the compounds that I have used, skim-milk is the cheapest and best. About twice a year I see the receipt for government whitewash: I have found it expensive, not much better than ordinary whitewash, very dazzling to the eye when new, and easily washed off. Oil and lead are too expensive for old and unplaned buildings—as it is a good deal like pouring water into a rat-hole to try to fill the cracks with expensive paint. Paints last but a few years at the most for some reason unknown to me, unless it is that they are made to sell only, and the quicker they fade or peel off, the more can be sold.

The following mixture is so cheap and so quickly put on that one can afford to paint as often as needed; but from my experience, if properly made and put on, it is more durable than the others. It is made of skim-milk, (either sweet or sour) water lime, or a low grade of cement, and colored with yellow or red. There is no particular formula, and you just put some cement into the milk and a little of the color, and stir. The lime will settle to the bottom, and the mixture should be kept well stirred while using, and no more made than can be applied before leaving it for the day.

I took a butter-tub and mixed milk and color well; then dipped out three quarts and put in some lime till it was a thin paint. The cement or water lime varies, and I cannot give the exact quantity. It should be thin, so as to spread easily and enter the surface. It should be well rubbed, and not enough left on to form a thick coat. It works best on rough surfaces, as rather more can be made to stay on and the wood shows through less than on the planed boards.

The only danger is of getting it too thick and leaving on so much that later a sudden jar will cause it to flake loose and fall from its own weight. To get the best effect, there need not be enough on to allow one to split it off with a knife without taking the wood with it. We apply with a four-inch brush, or on old buildings with a scrub broom, and do a "wholesale job." At a short distance, after five years' wear, it has all the appearance of the best paint—C. E. Chapman, in 'Country Gentleman.'

How You Should Dairy.

Address Delivered at Various Places on the Occasion of the Blue Valley Creamery Company Dairy Special Over the Chicago, Great Western Railway, August 2, 3, and 4, 1905, by R. M. Washburn, State Dairy Commissioner of Missouri, Columbia, Mo.

When starting into any new or partly new work, or when in a work and realizing that others with no better natural conditions than we have, are making a more decided success than we are, we should go to these successful neighbors, either in person or through paper and books, and learn their ways of doing.

There are three factors which work for success in the dairy work: The man, the cow, and the market.

1. The man factor comes first because if he will, he can influence the others. First of all, he should be intellectually equipped, or, in other words, he must have the mental tools for doing the work. We may have been raised on the farm and among stock, and yet not know the business as we need to know it for success. Did you ever stop to think that all

we know, all the knowledge of the human family is the experience of innumerable individuals, and that to you and me is given but a tiny part of this vast amount of experience? Our neighbor's experience is just as sound and to him as valuable as ours is to us. Let us, then, not scorn his words of warning or advice, even if we do not see them in a book or paper, but test them and use those parts that are useful to us. You have all read of the silo. Do you know its worth in the dairy? its strong and weak points? its cost, and how it should be built? If not, post yourself. Let me say, the silo is to the dairy farmer what the twine-binder is to the grain-raiser. You can still harvest your grain with the cradle, but you can do it much cheaper with the binder. You can dairy without the silo, but you can do it cheaper with one. The silo is not a new thing, even in this country. Write for Bulletin 155 Experiment Station, Wooster, Ohio, to learn the value of the silo in dairy-feeding, and to Experiment Station, Madison, Wis., for Bulletin 125, to learn how to build one.

Do you understand what is meant by the balanced ration? You can balance and not know it (many of you do), or you can dangle along at dairy work and not balance the ration at all; but you can produce more economically by feeding a balanced ration. We have little to say about the price butter-fat is to bring, hence it is necessary for us to produce economically.

Did you know that the cow that freshens in the fall of the year will give fully 25 per cent more milk during the year than she would if she freshened in the spring? That the fall-fresh cow will then give butter-fat when it is high in price, thus making her fully 50 per cent to 100 per cent more valuable than she would be if she had calved in the spring? Last summer I paid 15½ cents a pound for butter-fat and had twice as much as I wanted, and last winter I paid 33 cents and did not get half enough to supply my trade. Did you know that the fall calf, raised on sweet skim-milk and corn, will be as large at one year old as the spring calf that runs with its mother will be at 1½ years? Try it, if you are skeptical.

Did you know that in nearly every herd of cows there are a few who do not pay their board, who are being supported for their company? It's a fact. Do you know how to operate the Babcock milk-test, and find out these ungrateful warders? For \$5 you can get a tester with full directions the way to run it.

2. The man must be in sympathy with his work, must be able to meet and treat his cows as intelligent friends, not as so many dead machines, or as a wheelbarrow to be used or let alone at will. The cow that has been taught that her master is her best friend, will give more milk than one who is half afraid of her keeper.

The calf, at the end of the first or second day, should be removed entirely from its mother to be raised on skim-milk. I have not time now to go into the question of raising calves on skim-milk, but you can raise a better dairy calf on skim-milk than on whole milk and for a fraction of the cost. Write to the Agricultural College, Manhattan, Kansas, for Bulletin 126 on calf-raising. When the calf is removed, the cow cries for her child; that is the golden moment for the dairyman. Go to her in kindness, treat her quietly, caress her, feed her, and relieve that pain in her udder by quietly milking her. She will soon look to you for this relief and will adopt you as her calf, will look for your coming and caress you as she would a calf. This is not a day-dream. I have done just what I am saying—have been adopted and complimented.

I am not able to tell you how many gallons of cow love it takes to bring a dollar, but I do know that sympathy has a commercial value; that a nervous cow so treated will give from 15 to 50 per cent more milk than one not so treated. The man must then be both mentally and sympathetically equipped.

The second factor in dairy success is the cow. The average cow of this country gives only about 175 pounds of butter a year, while the best cows give from 400 to 600 pounds, but yet these common cows are better dairy cows than the common owners are dairymen.

It has been demonstrated abundantly that these same 175-pound cows would, if well housed and liberally fed make from 225 to 275 pounds a year, and do that cheaper per pound than when they gave a small amount. Keep the cows you have, select them by means of scales and a Babcock tester. Keep calves from only those cows that you know to be best. Get a young bull of some pronounced dairy breed.

THIS SKIMMING MACHINE takes the cream quicker than wringers squeeze water from clothes. It gets a quarter to a half more cream than by setting, because it uses centrifugal force—a force thousands of times stronger, quicker, more effective than the force that makes cream rise in pans.

Sharples TUBULAR CREAM SEPARATORS

Skimming finished five minutes after milking, because boy of ten can run Tubular during milking. No skim milk to warm, because skim milk is fed still warm from cow. Half less washing, labor and expense, because only cream is put away. Catalog X-165 explains clearly.

THE SHARPLES SEPARATOR CO.
Toronto, Can., West Chester, Pa., Chicago, Ill.

THE SEPARATOR THAT PAYS FOR ITSELF

Occasionally the intending buyer of a cream separator who has but a small amount of ready cash to invest is tempted to put his money into one of the so-called "cheap" machines that are being largely advertised. Although he recognizes the superiority of the **DE LAVAL** machine and his need of a good separator, he invests in the "cheap" trashy machine because he does not happen to have ready the full amount which he supposes to be necessary to buy a **DE LAVAL**. This is where closer investigation of the matter would pay him well. A

DE LAVAL SEPARATOR

may be bought upon such liberal payment terms that it will more than earn its cost while the buyer is paying for it. In addition the **DE LAVAL** buyer has positive assurance that his machine will be good for at least twenty years of service, during which time it will save every possible dollar for him and earn its original cost over and over again. If he purchases the so-called "cheap" separator he must pay cash in advance and then take the chance of the machine becoming worthless after a year or two of use, to say nothing of the cream it will waste while it does last—all of which means that the buyer has virtually thrown away the money invested in the "cheap" separator and wasted his time, labor and product in the bargain. The **DE LAVAL** is THE separator that pays for itself—lasts on the average ten times longer than any other machine and insures the greatest possible profits in the end. This being the fact there surely can be no economy in the purchase of the so-called "cheap" separator, however small its first cost may be. Remember that the **DE LAVAL** pays for itself. Catalogue and full particulars gladly sent upon request. Write to-day.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.

General Offices:

109-113 Youville Square

MONTREAL

1213 Filbert Street.

75 & 77 York street,

TORONTO.

PHILADELPHIA.

74 CORTLANDT STREET,

9 & 11 Drumm Street.

NEW YORK.

14 & 16 Princess Street

SAN FRANCISCO

WINNIPEG.

Cream is Cash

AT The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business. Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in **Cash**.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.

PEERLESS CREAM SEPARATORS

Reasons Why the PEERLESS is the best

FIRST—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

SECOND—Compound feature, two bowls in one, hollow bowl and disk bowl combining all the features of the tubular and disk machines.

THIRD—Enclosed frame. Free from dust. Injury resulting from machine impossible.

FOURTH—Perfectly noiseless.

FIFTH—Heavy enough and strong enough to lift a box-car, which insures durability.

SIXTH—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-1000 of an inch.

SEVENTH—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the PEERLESS machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at a small cost.

EIGHTH—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent butter fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

Bradley, Alderson & Company

Kansas City, Missouri

10th and Hickory

The Master's Address.

(Continued from page 289.)

and now in force, on taxation, transportation, insurance, pure food, and various protective measures.

No one can fully state or even approximately estimate the value of these various laws to the farming interests of this country and to the public welfare. It is safe to say that the laws secured by Grange influence are worth billions of dollars to the American people, and hundreds of millions to the farmers alone.

Laws That Are Advocated.

The following proposed legislation was considered, approved and urged at the 33d, 34th, 35th, 36th, 37th, and 38th sessions of the National Grange:

- Free delivery of mails in the rural districts, and that the service be placed on the same permanent footing as the delivery of mails in the cities, and the appropriations to be commensurate with the demands and the benefits of the service.

- Provide for postal savings banks.

- Submit an amendment to the Constitution providing for the election of United State Senators by direct vote of the people.

- Submit an amendment to the Constitution granting the power to Congress to regulate and control all corporations and combinations, thereby preventing monopoly and the use of their corporate power to restrain trade or arbitrarily establish prices.

- Enlarge the powers and duties of the Interstate Commerce Commission, giving it authority to determine what changes shall be made or what practices are discriminative or unreasonable, and their findings to be immediately operative and to so continue till overruled by the courts.

- Regulate the use of shoddy.

- Enact pure-food laws.

- Provide for the extension of the markets for farm products equally with manufactured articles.

- The enactment of the anti-trust law, clearly defining what acts on the part of any corporation would be detrimental to public welfare.

- The speedy construction of a ship canal connecting the Mississippi River with the Great Lakes and the Great Lakes with the Atlantic Ocean.

- Revising the fees and salaries of all Federal offices and placing them on a basis of similar service in private business.

- Provide for parcels post, telephone and telegraph in the mail service.

- Provide for National and State aid to improve public highways.

I again recommend to the several State Granges that they continue to urge upon their respective State Legislatures the enactment of appropriate legislation on the following important matters:

- Anti-trust law and provision for State inspection of all corporations.

- Law on taxation that will compel all property to bear its just proportion of taxation.

- Pure-food law.

- Provide State Railway Commission with full power of fixing maximum rates for freight and passenger service on all railroads subject to their jurisdiction.

- Such a revision of the fees and salaries as will place them on an equitable basis.

The Grange stands as a unit for the principles involved in the above proposed legislation, all of which are important and should be speedily enacted into the laws of our country.

One of the most important acts of legislation to be secured at the coming session of Congress is the enlargement of the powers and duties of the Interstate Commerce Commission, so that it shall be given full power to give to the American people just and equitable rates on all railroads and other transportation facilities, and absolutely prevent discriminations, rebates or advantages arising from the use of the private car system.

President Roosevelt in his last annual message to Congress, said: "The Interstate Commerce Commission should be vested with power where a given rate has been challenged and after full hearing found to be unreasonable to decide, subject to judicial review, what shall be a reasonable rate to take its place, the ruling of the commission to take effect immediately, and to obtain unless and until it is reversed by the court of review."

This is a full and complete approval of the position of the Grange on this most important matter, one that underlies the prosperity of every industry of the country, and especially does it underlie the prosperity of agriculture. Agriculture furnishes 60 per cent of all the freight of our internal and coastwise trade. Agriculture, more than any industry is interested in a just and reasonable rate. The value of every

product of the farm itself, as railroads are now managed, is absolutely in the hands of a few railroad managers. They can raise or lower the price of every product of the farm to the producer and consumer, raise or lower the value of every farm in America, make it possible for agriculture to be reasonably profitable, or practically pauperize the farmers of the country. Government has not given any adequate protection to this loyal and deserving class, but has left them absolutely at the mercy of these corporations.

The time has come when justice should be secured. Patrons, look well to the actions of those who represent you in the Congress of the United States! Observe their actions; listen to their voice; and mark well how they vote upon the pending measures. Let those who are for the people show it by their voice and vote; and let those who are against the people for the corporations be known also. Every true American citizen should stand for the right, stand for his home, his family, and the best interests of the entire country.

We live in an age of intense commercialism, an age where men will do what a generation ago they could not do and maintain their self respect. I refer to the frauds uncovered in the cities of New York, Philadelphia, St. Louis, Chicago, Milwaukee and other cities of our country, and the recent developments of betrayal of trusts in banks and the three great life insurance companies in New York. These exposures and developments undermine public confidence and will greatly injure the prosperity of our country unless law is vindicated, and those in official or private life who are guilty, are punished and the dignity of law maintained.

We believe all public officials should not only avoid dishonest practices, but should avoid doing anything that could give rise to these suspicions. We believe that officers of State or Nation ought not to accept, or be allowed to accept free passes from transportation companies. We believe every State ought to pay such compensation to all officers that they need not supplement their salaries by any such methods. We believe the public conscience ought to be aroused on this question and such laws passed as will prevent the practice. It is humiliating to citizens of the State or Nation to know and believe and observe that their public officials have to accept such gratuities from corporations. It lowers the standard of independent manhood to see men occupying high official position and at the same time placing themselves under implied obligation to transportation companies.

IN MEMORIAM.

The silent reaper has invaded our homes and gathered sheaves of his own selection and borne them to the great storehouse into which all will sooner or later be garnered. We miss the cheerful words and fraternal hand clasp of several loved members who have met with us as members of the National Grange in previous years. Their voices are silent and their fraternal encouragement no longer cheers us in our annual sessions, but the influence of their work and devotion to the principles of our Order will remain forever as an inspiration to greater and better lives. We are called upon to mourn the loss of:

Brother Cyrus G. Luce, Past Master, Michigan State Grange.

Brother A. A. Smith, Past Master Rhode Island State Grange.

Sister Perlea M. Dethick, wife of the Master, Ohio State Grange.

Sister A. J. Richardson, wife of Past Master Tennessee State Grange.

Sister C. E. Shipley, wife of Past Master Oregon State Grange.

Sister Emily J. Trimble, wife of Past Secretary of National Grange.

Sister J. M. Thompson, wife of Past Master Illinois State Grange.

Sister Patience B. Hunt, wife of Past Master Maine State Grange.

CONCLUSION.

Eight years ago I was elected Master of the National Grange, an honor, I assure you, I have always appreciated most highly. During this time I have tried to be loyal to agriculture, and to discharge the duties imposed by this Order faithfully. These duties were easy and pleasant, made so by the fraternal courtesy and loyal support given me by the members.

The Order has prospered during this period, having made a net gain of membership of 78 per cent, and a net increase of the funds of the National Grange of 68 per cent. This gratifying success and prosperity came to the Order, not from any merit of mine, but on account of the united efforts of its members. No factional, sectional or partisan prejudices obtain in the Order to weaken its influence and power. It

**You Can't Afford to Make a Mistake**

Go about it in a judicious manner. Don't be over persuaded by smooth agents. Investigate for yourself. That's all we ask in our favor. We claim that the

OMEGA Cream Separator

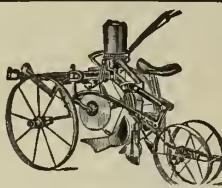
will do better work for you—producing better cream—with less labor in turning, less labor in washing and less trouble all around than any other separator ever made.

The work it does proves our claims. The only way we can really prove it to you is to show you. Words won't do it, but works will. Will you let us show you?

Read This Offer. We will be mighty glad to set up an Omega on your farm and let you try it and test it in every way—if it excels all other separators (**and it does**), why, it's the separator you want. If it doesn't, the trial will not cost you a cent. You can't afford to make a mistake. Try an Omega first. At any rate, send for **FREE TRIAL OFFER** and catalog, and our new book "More Milk Money." It tells how to care for cream; how to make butter; how to select good cows; how to wash butter; how to avoid "white specks," and a hundred other things you ought to know. We will send it to you **FREE** if you tell how many cows you keep, give address of a neighbor who keeps cows, and mention this paper.

The Omega Cream Separator Co.,
23 Concord Street, Lansing, Mich.

Please Remember: All we ask is that you give the Omega a trial—let it prove to you how good it is. If it does not satisfy you, you are out nothing

**The Best Lister**

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1310 West 13th Street. - - - KANSAS CITY, MISSOURI

From Factory to Farm

14 in. Steel Beam Plow, Double Shin
\$8.40

Hard Steel Castor Coultor with Plow, \$1.60 extra.

Steel Ranges. Best Walking Cultivator, 4 shovel, \$12.00. Best Walking Cultivator, 4 shovel and Eagle Claw, \$16.25. Improved Riding Cultivator, 4 shovel, \$19.00. Improved Riding Disc Cultivator, 6 Disc, \$25.00. Corn Planter, complete, 80 rods wire, \$27.75. Address

HAPGOOD PLOW CO.,
(Only plow factory in the United States selling direct to farmers at wholesale prices.)

NO AGENTS NO MIDDLEMEN

See what it means.

64-Tooth Lever Harrow	\$8.15
96-Tooth Lever	\$12.45
14-in. Imp. Lister	\$17.75
14-in. Sulky	\$17.75
Lester	\$1.65
8-ft. Rake	\$16.00
Sewing Machine	\$9.00
Best Sewing Machine	\$10.00
Gt. equal day	\$20.00
machine	\$17.50
Steel Range with Box	\$19.75
Fine Top Buggy	\$33.50
12-16 Disc Harrow	\$17.00

**Save Your Clothes**
By Washing Them in
A Gee-Whizz Washer

SENT ON FREE TRIAL

It would surprise you to know how much wear and injury clothes receive when washed by rubbing between rollers or heavy lids, jerked around by pegs, or in fact by any friction method. None of this in the Gee-Whizz as it washes by driving hot soap-suds through the clothing with force and speed, by means of water wheels. No friction on the clothes. Guaranteed to wash perfectly clean in from four to seven minutes. Galvanized steel tank. No warping and no falling apart. Adjustable to wash anything from a napkin to a quilt, or a length of carpet. Write at once for full particulars and free trial proposition.

Gee-Whizz Mfg. Co., E Walker St. Des Moines, Iowa

has been the pleasure of our members to contribute what they could to increase the prosperity and happiness of each other, to elevate agriculture, promote general prosperity, improve society, and to make brighter, happier and more sunny farm homes in all parts of our country.

This session closes my official term. I return to you the gavel and other insignia of office and shall take my place as an humble member with the great army of Patrons of Husbandry. I need not bespeak for my successor the same loyal and cordial support and courtesy you have extended to me. Your devotion to the Order will inspire you to continue in the future as in the past, to loyally support the officers chosen to preside over your deliberations, to make more effective their efforts to extend, improve, and strengthen the Order that its helpful influence may be felt in every farm home in our land.

As the years come and go, industries of our country will prosper and decline, fortunes will be made and lost. Even government may change its form, but so long as the world stands agriculture will be the foundation of National wealth and prosperity.

There will be an open meeting of Indian Creek Grange at Indian Creek School House in Northern Shawnee County, on the evening of March 29. Following is the programme. "Why Do We Favor National Aid to Highway Improvement?" C. D. Skinner; "Why Should Arbor Day Be Observed?" County Superintendent J. R. Carter. Music, Carl Ball. "Practical Poultry Raising," Mrs. H. K. Evans, followed by discussion by Mrs. O. F. Whitney and Mrs. Merritt. It is expected that Indian Creek Grange will dedicate its new piano at this meeting. Refreshments at the end of the meeting.

The Gentle Art of Gardening.

(Continued from page 291.)

often found a garden of flowers that was not only pleasant to the passer-by, but which furnished almost the only variety and recreation in lives that had but little of other joys or pleasures. In cities where space and sunlight are at a premium, the roofs and housetops are sometimes utilized as space for plants.

LITERATURE ON GARDENING.

The literature pertaining to the garden has been greatly enriched in recent years, which is another indication of a popular demand for information on things of the garden, and the shelves of any prominent bookstore now carry books and magazines on all branches of this subject. The flower and seed catalogues are handsomely gotten-up and richly illustrated, and while some allowance must be made for exaggerated descriptions, yet in the main they are reliable and full of information, and they have done more than any other one agency to spread a knowledge of and love for flowers and trees and gardens. If the description of a new variety seems too rosy, you may be surprised to find, as I have found, that with the proper care and attention, the new variety even surpasses the description. This, of course, may have been due to the superior qualities of our Kansas soil and sunshine. The first catalogue of plants was published nearly three hundred years ago by Gerard, an English botanist who grew and named more than a thousand varieties and species of plants. The first catalogue in the United States was published about one hundred years ago, and now there are many whose annual visits are welcomed as a friend bringing a message of joy and hope and anticipation of the good and beautiful things that may come through the year. The first flower catalogue of my recollection was in the early sixties when we received that sent out by James Vick, and the truthful descriptions of flowers and vegetables and the clear, practical, cultural directions of his catalogues were written with such a kind friendliness, that when he died thousands of people over this whole land whose lives had been made brighter by his flowers or his kind words, felt that they had lost a personal friend. Probably no man ever did more to spread a knowledge of flowers in this country than did James Vick.

Of all books giving practical information about everything to be planted in a garden and the different varieties of plants, whether trees, shrubs, flowers or fruits, with full directions for their care, no one book with which I am acquainted, is so complete as Professor Bailey's "Garden Making." Of other books there is no dividing line between those written for practical information about gardening, and those like the story of "Elizabeth and Her German Garden," or "The Garden of a Commuter's Wife," or "Ellwanger's, the Garden Story," and many others which may be called garden literature. It was of this class of books that H. W. Beecher said: "Every book which interprets the secret love of trees and gardens, every essay that brings men nearer to the understanding of the mysteries which every tree whispers, every brook murmurs, every weed even hints, is a contribution to the wealth and happiness of our kind."

We have a fine prospect in Topeka of having a collection of trees of native and exotic growth that will soon be a very interesting and instructive object lesson to all who care to study it. At Central Park a start has been made that promises much. Not only most of the ordinary species of trees, but many that are scarcely to be seen elsewhere, have been planted here and are growing well and have endured two winters of unusual severity. Several species of magnolia, deciduous cypress, liquid amber, tulip tree, azalea, spinosa, and many choice specimens of shrubs and hardy plants are among the things already established. It is to be hoped that in the part yet to be planted, there may be found room for a specimen, not only of every tree native to Kansas, but of every tree that will grow in this climate.

In the new Willow Park which is to be planted in the near future, as a result of the efforts of the members of this club, it requires no stretch of imagination to picture a place of beauty and rest that will delight beholders for many generations to come.

PRACTICAL RULES.

Coming to a practical discussion of how to make a garden and what to plant in it, I know of no general advice any better than the twelve rules given by George H. Ellwanger, in his

delightful book, "A Garden Story." These rules are good for any garden, large or small.

I. Whatever is worth doing at all is worth doing well.

II. Study soil and exposure, and cultivate no more space than can be maintained in perfect order.

III. Plant thickly; it is easier and more profitable to raise flowers than weeds.

IV. Avoid stiffness and exact balancing. Garden vases and garden flowers need not necessarily be used in pairs.

V. A flower is essentially feminine and demands attention as the price of its smiles.

VI. Let there be harmony and beauty of color. Magenta in any form is a discord that should never jar.

VII. In studying color effects do not overlook white as a foil. White is the lens of the garden's eye.

VIII. Think twice and then still think before placing a tree, shrub, or plant in position. Think thrice before removing a specimen tree.

IX. Grow an abundance of flowers for cutting. The bees and the butterflies are not entitled to all the spoils.

X. Keep on good terms with your neighbor; you may wish a large garden favor of him some day.

XI. Love a flower in advance, and plant something every year.

XII. Show me a well-ordered garden, and I will show you a genial home.

THE GARDEN OF THE FUTURE.

What of the garden of the future? With all the applications of modern science and other arts, what may we expect of improvement in the art of gardening, resulting from scientific research and experiment? Does gardening afford a field for the use of modern, scientific knowledge?

For reply: We may surely expect great improvements in all forms of plants, fruits, and flowers, as we become better acquainted with the characteristics and physiology of plants, and with the laws and processes of their growth and reproduction, and are able to make a patient application of their knowledge to the work of hybridization, selection and propagation. The work that has been done and is being done by Mr. Burbank, with his marvelous skill, is already furnishing substantial proof of what may be accomplished, and is probably only a beginning of this great work.

With the magnificent fund provided for research and experiment in this line, and with the attention which the work is receiving from the Government and from earnest men, trained in all branches of science which bear on it, results must surely come that will be full of pleasure and profit to the whole world.

Gardening, while it may be classed as a fine art, has two branches: one, the planning of grounds, the arranging of trees, shrubs, flower beds, garden walks, and other embellishments, which more particularly would require the head and the heart and the eye of the artist; the other branch, that of caring for the plant, its propagation and improvement and the ability to select those plants which under proper conditions may be made to improve the race. Mr. Burbank seems to be a master of this branch of the art, and his success will stimulate others to work in this field.

For practical results right here at home, it seems to me that most can be done by stimulating among our friends and neighbors an interest in all that helps in improving and beautifying the surroundings of every home, and especially to show them that there are no deep mysteries about the art, and that for an ordinary house, no great outlay of time or money or effort is necessary, and that for all the outlay given, large returns will surely come, especially to those who love the gentle art of gardening.

Don't Plant Scrub Corn.

Like begets like, as surely as sunset follows sundown. This has been demonstrated a thousand if not millions of times in the kingdom of plant and animal breeding. In the face of this we have wondered a thousand times why some farmers will continue to breed to scrubs and continue to plant scrub varieties of seed-corn, especially when a bushel of seed-corn will plant 7 or 8 acres, and costs by 15 to 20 cents per acre for seed that will give an increased yield of 20 or 30 bushels per acre, making the increased yield at a cost of less than a cent per bushel. In another place in this paper will be found the illustrated advertisement of "Ratekin's Pride of Nishna" yellow dent, which has become so famous all over the Western and Central Western States. Every corn-grower should if he does not already grow it, send to the Ratekin Seed House of Shenandoah, and get a few bushels of this corn for seed the coming season. The price at which

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

they sell this seed is very reasonable indeed—\$1.35 per bushel, and in 10-bushel lots or more, \$1.25 per bushel. See their advertisement in another place

Dry Farming Magazine.

The Dry Farming Magazine published at Denver, Colorado, is devoted to scientific soil culture and is edited by Prof. H. W. Campbell, a renowned soil expert.

OUR MARCH OFFER.

To any of our readers who will send in two new subscribers for one year and \$1 we will send Dry Farming Magazine for one year. Address, The Kansas Farmer Company.

Colorado Farm and Ranch is the name of a new weekly publication at Sheridan Lake, Colo., edited by Leslie F. Randolph, a prominent newspaper man formerly of Kansas. It starts out with a helpful list of Kansas subscribers who are interested in the wonders of Eastern Colorado. The KANSAS FARMER has received many inquiries regarding this section of the country. All who are interested should write to Mr. Randolph.

R. F. D. Carriers Like Caustic Balsam.
Fair Grove, Mo., Jan. 30, 1905.
The Lawrence Williams Co., Cleveland,
Ohio:

I used Gombault's Caustic Balsam for an extra bad case of ring bone and can say it did good from the first application. I believe it is all you claim for it.

JOHN W. HARTT.

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 55 cars; Saturday's inspections were 34 cars. Offerings were small for Monday. The demand was light. Prices were irregularly higher, in some instances unchanged, in others up 2@3c per bushel. The greatest advances were on low grades. The sales were: No. 2 hard wheat, 1 car 76½c, 2 cars 75c, 4 cars 74½c; No. 3 hard wheat, 1 car 74½c, 2 cars 74c, 3 cars 73½c, 1 car 73c, 1 car 72½c; No. 4 hard wheat, 1 car 70½c, 3 cars 70c, 2 cars 67c; rejected hard wheat, 1 car 64c, 1 car 63c, 1 car 62c; No. 2 red wheat, 1 car 90c; No. 3 red wheat, nominally 84 @87c; No. 4 red wheat, 1 car 80c; No. 4 spring wheat, 1 car 71c; mixed wheat, 1 car 75c.

Receipts of corn were 40 cars; Saturday's inspections were 29 cars. The demand was fair and the offerings small. Sales were made at 1@½c advance, as follows: No. 2 white corn, 1 car 40c; No. 3 white corn, 1 car 40c; No. 2 mixed corn, 3 cars 38½c, 1 car 38½c; No. 3 mixed corn, 12 cars 38½c; No. 4 mixed corn, 1 car 36c.

Receipts of oats were 16 cars; Saturday's inspections were 15 cars. The increased offerings met with fair demand and prices were in the main unchanged, as follows: No. 2 white oats, 4 cars 21½c; No. 3 white oats, 5 cars 30c, 4 cars 30½c, 1 car 31c; No. 2 mixed oats, 1 car 30½c, 1 car red 32c; No. 3 mixed oats, 1 car 29½c.

Barley was quoted 36@37c; rye, 56@58c; Kafir-corn, 58@60c per cwt.; bran, 85@87c per cwt.; shorts, 90@95c per cwt.; corn-chop, 75@77c per cwt.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., March 12, 1906.

Supplies of cattle at the five leading markets to-day were 16,000 less than the number in sight on last Monday, and as result of increased marketing, steer values dropped 10c all around. Cows and heifers were only in moderate supply, and the market ruled active to strong, 10c higher. Bulls and veals were in good demand and steady. Receipts of stockers and feeders were considerably larger than was expected, and buying was comparatively free of desirable qualities at prices fully steady with the low close of last week. Following are current quotations: Native steers \$4.10@6; Texas and Westerns \$3.75@5.40; cows and heifers, \$1.65@4.60; bulls and stags \$1.90@4.65; veals \$3@6.75; yearling calves \$2.50@3.75; stockers and feeders \$3@4.50.

There was a very general increase in supplies of hogs at all points to-day, as compared with corresponding day last week, and buyers took occasion to depress values. The opening prices were around 2½@5c lower than general trade of Saturday with more selling 5c lower than any other way. Prices ranged from \$6@6.25 with bulk selling at \$6.20@6.25. The country should keep in mind that packers will depress values on any increased receipts, therefore, little rallies should not be followed very closely, and shipments should be made as soon as ready. Demand here continues very strong, and prices are being maintained at a very high level, as compared with competitive points.

The receipts of sheep are in excess of 19,000 to-day, and the market was active and steady on all offerings, lambs selling up to \$6.70 and ewes at \$5.40.

WARRICK.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo.

Monday, March 12, 1906.

As a result of light cattle receipts last week, the market closed the week 15@25c higher on killing cattle than close of previous week. Some sales of heifers showed even a greater advance, while stocker and feeder trade slacked up a little after first of the week, account of absence of buyers. Yard traders were unable to make a good clearance, although the supply was light and they reduced prices 15@25c from the high time of the week. Bad country roads and muddy feed-lots and soft fields are given as the reasons for buyers staying at home.

The cattle run to-day is 12,000 head, containing a good proportion of beef steers. Market is steady to 10c lower. Buyers were unable to fill their orders last week and packing houses are killing up clean, but orders for meat are not as urgent as a few weeks ago. The supply to-day is three to four thousand greater than either of the last two Mondays, but the run for last week was only 31,000 head, a reduction of 10,000 from the week before. Top steers sold at \$8.80 last week, top to-day \$5.45, bulk of sales \$4.75@5.30. These prices are 10@40c higher than at this time last year, when we were on the eve of the

THE KANSAS FARMER

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line or seven words per week. Cash with the order.

Electro must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

HOLSTEINS—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Heather Ectipsen 33761 in service. A. L. Wynkoop, Bendena, Kans.

FOR Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

MILK COWS FOR SALE—By V. B. Howey, Route 1, Topeka, Kansas.

FOR SALE—A herd of registered Red Polled cattle at a bargain. I. Sandusky, Route 9, Wichita, Kans.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th; also car high grade yearling bulls. Duff & Sons, Horton, Kansas.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FIVE REGISTERED HEREFORD BULLS for sale. all good individuals. Eight months, 9 months, 1 year, 20 months, and 4 years are their respective ages. Cooper Monroe, Lyons, Kans., R. F. D. 5.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

FOR SALE—The great show and breeding bull, 198 Duke Wildwood 148143, that took 4th place at the Kansas City Royal in 1904; also 20 cows and heifers all choice individuals, some show stuff. George Manville, Fawcette, Mo.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

FOR SALE—Hereford bulls, choice and blocky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGREE SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

boom prices paid in April. Heifers and steers mixed sold at \$5.35 last week, choice heifers bring \$4.50@5, best heavy cows \$4.60, bulk of she stuff \$3.25@4.40, bulls \$3@4, cannars and stock cows and heifers \$2.25@3.25. Veals sell up to \$7 again. Feeders range from \$4@4.75, stockers \$3.35@4.50, some low grade stuff \$2.85@3.25.

Hog supply last week was 42,000 head, a decrease of 10,000 from the week before, and smallest run this year. Prices advanced 5@15c during the week. The run to-day is 7,000 head, market weak to 5c lower, tops at \$6.25, bulk of sales \$6.10@6.20, light weights up to \$6.15. At no time this winter have packers been able to accumulate any stocks of pork products, and it is believed that prices will continue strong even if the run improves with better shipping conditions in the country. Prices are \$1.25 higher now than a year ago.

Sheep and lamb run was 42,000 last week, fully up to the average lately. Lambs sold a shade lower, but aged sheep continued scarce and firm. Supply to-day is 7,500, market strong to 10c higher, including lambs, which ranged from \$6.35@6.75 to day. Ewes sold to-day at \$5@5.35, yearlings \$6. wethers not tested but quotable at \$5.70@5.90. Some thin lambs, shipped in because feeders ran out of feed, sold last week to be finished out at \$5.70@5.90. J. A. RICKART.

CATTLE.

FOR SALE—The pure Crickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. heavier 7 days, and "Financial Count" (imported); granddams held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

SHEEP.

I HAVE for sale about 1150 sheep, 800 ewes, 300 mixed yearlings and 30 rams; large, smooth merinoes; good shearers, at \$4.00 per head; come and see them, they are worth the money. E. H. Boyer, Meade Co., Meade, Kans.

HELP WANTED.

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros. The 101 ranch, Bliss, O. T.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

WANTED—Single man on farm, must be congenial with stock. F. M. Linscott, Farmington, Kan.

HORSES AND MULES.

FOR SALE—Black Mammoth Jack, 3 years old past, 14½ hands high; perfect and first-class in every respect and guaranteed; \$600 if sold before April 1st. A. E. Cooper, Halstead, Kans.

FOR SALE OR TRADE—For stock cattle, two Jacks coming 3 years old, 15½ hands high; weight 950 pounds; also one 4 year old Jack 14 hands high. Good performers. Also pacific stallion by Silkwood, 16½ hands high, weight 1,250. Address J. C. Hentzler, R. 2, Topeka, Kans.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of Jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kansas.

POULTRY.

PARTRIDGE COCHINS—Toulouse Geese, purebred; farm raised. Eggs \$1 per 13 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Laugshau eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Bred by W. F. Cox, Clifton, Kansas. Eggs for sale at \$2 per 15.

CORNISH INDIAN GAMES—Raise chickens for meat and eggs; not for fat and feathers. For the best meat and eggs in the world, buy a sitting of eggs, \$1.50 and \$2 per sitting. L. Horst, 400 West 10th, Newton, Kans.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

S. C. B. LEIGHORNS—Beautiful fowls, fine markings, splendid layers. Eggs, \$1 per sitting; \$8 per hundred. Mrs. D. M. Evans, Edgerton, Kans.

BARRED PLYMOUTH ROCK EGGS—From large, beautiful, pure-bred chickens, only \$1 per 15; \$5 per 45 from our best matings. Hawkins & Bradley strain, scoring 94 to 96. 17 years experience with poultry. Mr. and Mrs. Chris. Bearman, Ottawa, Ks.

FOR SALE OR TRADE—One good black jack, with white points, 15½ hands high, 7 years old, a good individual and a good breeder, or will exchange for good dairy or pure-bred beef cattle. Address John L. Stanley, Nyhart, Bates Co., Mo.

BARRED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 for 100. T. B. Wilson, Route 7, Osage City, Kans.

FOR SALE—Light Brahma and White Wyandotte cockerels. I have a few high-scoring ones left, as it is getting late I will now offer them at a bargain, \$2 to \$5, scoring 92 to 94. Satisfaction guaranteed. Eggs, \$1 to \$2 for 15; Buff Cochinchina Bantams, \$1 to \$2. Mrs. J. R. Kenworthy, Wichita, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings headed by 91½ to 93 point birds; females 91½ to 93½. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92½; \$1 per 15, \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas

California Farms

Every Picture Speaks for Itself

Opportunities for the man of small means.

Ask us about them.



Thatched Summer House, covered with Palm Leaves. Delightful cool Retreat. Kearney Park, five miles east of Fresno Irrigated Farm Company's Tract.

Opportunities for the Capitalist or man with large Capital
Write for particulars

The A B C of Farming in California

Continued.

Question: Does dairying pay in Fresno County? Answer: Indeed it does. Better than any where else. We are selling our butter fat at 33c per pound right now and can average 25c for the year. We have two creameries in Fresno and are building another modern creamery in the midst of our tract. The man with 20 to 40 acres in alfalfa can make money very fast in the dairy business here. Remember that here grass grows the year round. Your cows are out in pasture in February just as they are with you in June.

Question: Can I get cows in Fresno County at reasonable prices? Answer: Yes. This is a great cattle and sheep country, but if you have a fine strain of Holsteins or a milking strain of Shorthorns, you had better bring them with you as they will sell well.

Question: How about grapes and vineyards in California. Answer: This is one of the greatest grape countries in the United States. We divide the grape industry into three distinct kinds of business. Table grape raising, raisin grape raising and wine grape raising.

Question: Which is the most profitable of the three? Answer: The table grape is the most profitable of them although it requires the most care to properly pack and ship the grapes. A fully matured

vineyard will produce from \$100 to \$400 per acre. The raisin industry is successful here which is the only sucessful raisin district in the United States. Raisins produce from \$75 to \$150 per acre net. Wine grapes are very easy to handle and requires no particular knowledge. They are picked in bulk and are sold to the winery by the ton and will produce from \$60 to \$150 per acre. This is a great sweet wine dristrict. We have vineyards in Fresno County like you have corn fields in Iowa covering hundreds of acres.

Question: Do you raise tree fruits in any quantity? Answer: Yes. We have great orchards of apricots, peaches and figs. A peach orchard is about the finest thing that one can have on earth. The net yield is from \$100 to \$125 an acre.

Question: Do you have any scale or disease on your trees? Answer; No. The warm dry summers of Fresno County are an absolute protection against disease. Orchards are free of scale and this is a matter of great importance.

Question: Can you tell me anything else about the opportunities on the Fresno Irrigated Farms? Answer: Yes, But it would require all the space on this paper. Write to us at once for our 64 page booklet. This will give you all the information you desire. We will mail it to you free upon request.

Fresno Irrigated Farms Co.,

**Main Office—511 Kohl Bldg., San Francisco, California
250 Pacific Electric Bldg., Los Angeles, California
1161 I Street, Fresno, California**

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD
Duroc-Jerseys
J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Orchard Hill Herd of Duroc-Jerseys.
Please write for private sale catalogue of young boars and bred gilts and sows. **R. F. NORTON & SON**, Clay Center, Kans.

Write us for description on June, July and August pigs. Prices \$3 to \$10 each. Eight choice herd sows, guaranteed. Prices right if taken at once.

NEWTON BROS., Whiting, Kans.
Breeders of Registered Duroc-Jerseys

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

Crimson Herd of Durocs

Our herd is headed by first prize boar Crimson Wonder 38755, Jr., by Crimson Wonder 26355, the great Boar Winner of many firsts, assisted by Kerr's Champion 3469, this fine boar is now for sale, also some fine young boar gilts for sale, also some August and September pigs.

MR. and MRS. HENRY SHRADER, Wauketa, Ks.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

Highland Herd of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

Egypt Valley Durocs

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. **H. W. STEINMEYER**, Volland, Kas.

POLAND-CHINAS.

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 88349; also a boar pig by Compromise 88203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 303768 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beatty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beatty's Extension 27968, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

Maple Valley Stock Farm

The grand breeder Mo. Chlp 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAQUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented.
H. N. HOLDEMAN, R. R. No. Girard, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Oak Grove Stock Farm**POLAND-CHINAS**

Best strains, good individuals. Choice fall pigs, both sexes, for sale at reasonable prices.

E. E. AXLINE Oak Grove Missouri
30 miles East of Kansas City on the C. & A.
"The Only Way." Long Distance Phone at farm, Jackson Co., Mo.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard,
Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREE POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32804, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kan.

200 Head Poland-Chinas

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, 1-2 Mile Sedgwick, Kansas.

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

CHESTER WHITES.**O. I. C. SWINE**

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair**CHESTER-WHITE HOGS**

Shorthorn cattle, Oxford sheep and Peafowl. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in nss.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs**Scotch Collie Dogs****B. P. Rocks**

One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,

H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulma, Silver Mina and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

BERKSHIRES.

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willems, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are Prime 64778, and Berryton Duke 72346. Boar at head of herd, Jourist topper 76277. Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72688. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,
Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES**Imported Blood**

30 extra choice boars, 100 to 150 pounds. 40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kans.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Ducks 56891, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65025, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.**Aberdeen-Angus Cattle**

25 Aberdeen-Angus 'Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED**Angus Cattle**

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale.

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

RED POLLS.**ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale.**

Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo.

Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see.

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle

Young Stock for sale.

WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens.

Address, S. C. BARTLETT, Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM**Polled Durhams**

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

GALLOWAYS.

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, FURLEY, KANS.

Breeder of Galloway Cattle

HEREFORDS.

Registered Herefords

Individual merit and choicest breeding. Dale Duplication 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56011 and Lord Albert 131557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 66634, the best living son of the great Beau Brummel.

L. A. MEAD, Kingdown, Ford County, Kansas.

For Sale—Bulls and females. Inspection invited.

SHORTHORNS.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by L. A. MEAD,

Kingdown, Ford County, Kansas.

For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM

'JOHN REGIER, Prop., Whitewater, Kans.

SHORTHORNS.

Pearl Shorthorn Herd

Forty Young Bulls For Sale. Ranging from 6 to 14 months old and sired by the noted Scotch bulls, Baron Ury 2d 124970, Sunflower's Boy 127337, and Gold Knight 179054. Address

C. W. Taylor

(Wire or Phone), Pearl, Dickinson County, (Mail Route No. 2), Enterprise, Kansas.

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds

of Shorthorns and Berkshires

Sir Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 2683 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early all bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. - Yates Center, Kans.

**Alysdale Herd
SHORTHORNS**

Headed by the great Cruickshank bull, Prince Consort 18708, sired by Imported Prince of Perth 158789 and out of own sister of Lavender Viscount 124755. Fine Young Bulls—13 to 16 months old, for sale, at very reasonable prices.

Sired by such bulls as Lord Mayer, Mayer Valentine, and Proud Knight.

C. W. MERRIAM
Columbian Bldg., Topeka, Kansas

HOLSTEINS.



C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young bulls and a few young cows and
heifers for sale.

**Cheap Rates to
California
and Mexico**

From February 15th to April 7th, inclusive, Colonists' tickets will be on sale to California and Mexico points at exceptionally low rates:

From	To	San Francisco	Mexico City
		Los Angeles	Guadalajara
Chicago		\$22	\$32
St. Louis		\$20	\$27
Kansas City		\$25	\$24

Through tourist sleepers from St. Louis on Tuesday of each week. You step into the car at St. Louis and do not leave it until you reach San Francisco. Ask your nearest railroad agent for rates or address

W. S. ST. GEORGE
General Passenger Agent
580 Wainwright Building, St. Louis, Mo.

Tickets on sale everywhere, via Missouri, Kansas & Texas Ry.

Collections made in all parts of the United States. No fee charged unless collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency
415 Kansas Avenue.
TOPEKA. KANSAS
Special attention given to stock-breeders accounts. Reference furnished on application.

When writing advertisers please mention this paper.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

REGISTERED BLACK MAMMOTH
and CATALONIAN JACKS, SADDLE and TROTTING HORSES

The best in the state and at a low price. Come, or write for prices on what you want.

G. A. FEWELL
LETON, JOHNSON CO., MO

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sexes. Also Shorthorn cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. Thisler, Chapman, Kas.

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700 pounds
4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40180, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks. Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

**Percheron Stallions
FOR SALE**

Three Percheron stallions:
Col. Carter 27952, grey and weighs 2,000 pounds, by Titus 17122 (36778).

Cricket 28007 by Titus 17122 (36778).

The other a black stallion of same breeding as Cricket.

Look up these horses and you will find their breeding of the best. Write me for full description.

**Wyatt Stanley
ANTHONY, KANSAS****NEW BOOK JUST ISSUED
SUCCESSFUL
FRUIT CULTURE**

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD,
Formerly Professor of Horticulture at the Massachusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, strawberry, blueberry, bucklerberry, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most successful methods of the present day, and is the most recent practical treatise on this important industry.

Illustrated. 5x7 inches. 265 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY
TOPEKA, KANSAS

**FIFTH TERM
JONES' NATIONAL SCHOOL
OF
Auctioneering and Oratory
Davenport, Iowa**

6th term opens July 22, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address,

THE KANSAS FARMER CO.,
Topeka, Kans.

LIVE-STOCK AUCTIONEERS.

LIVE-STOCK AUCTIONEERS.

**JOHN D. SNYDER,
Live Stock Auctioneer, Winfield, Kansas**

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

**R. L. HARRIMAN
AUCTIONEER
Bunceton, Mo.**

First
Class
Service.
Best
Results.
Terms
Low.

**Z. S. BRANSON
Live Stock Auctioneer
Lincoln, Nebraska**

Thorough knowledge of breeds, bloods and values
Terms reasonable. Inquiries cheerfully answered.

**John Daum
Nortonville, Kansas
Live Stock Auctioneer**

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

**JAS. W. SPARKS
Live Stock Auctioneer
MARSHALL, MISSOURI**

Fifteen years selling for America's best breeders. Moderate terms for best service.

**BERT FISHER
Live Stock Auctioneer**

North Topeka, Kans., and Norton, Kans. Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.

**L. R. Brady
Auctioneer
Manhattan, Kansas**
Fine stock sales a specialty. All Herd Books, Catalogues compiled. Sale tent free.

**Here's the Way
Northwest**

Buy a ticket good via the Burlington and get aboard either of the two daily thro' trains, one leaving Kansas City in the morning and the other in the evening. Both carry all kinds of comfortable equipment and travel over an interesting route all the way to Puget Sound.

Very low price one-way tickets on sale daily
February 15 to April 7.

Tickets to Butte, Helena or Anaconda, Mont., or points beyond, are good via the direct line thro' Billings or via Denver and Billings, with free side trip to Colorado Springs.

A postal card request will bring complete information.

E. A. ABBOTT, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

1906

**Burlington
Route**

WHEN WRITING OUR ADVERTISERS MENTION THE KANSAS FARMER

FRANK IAMS



lions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

120—STALLIONS—120

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent ton stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a clinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. George, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM
Breeder and Importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS.
Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.
S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA, UNIVERSITY.

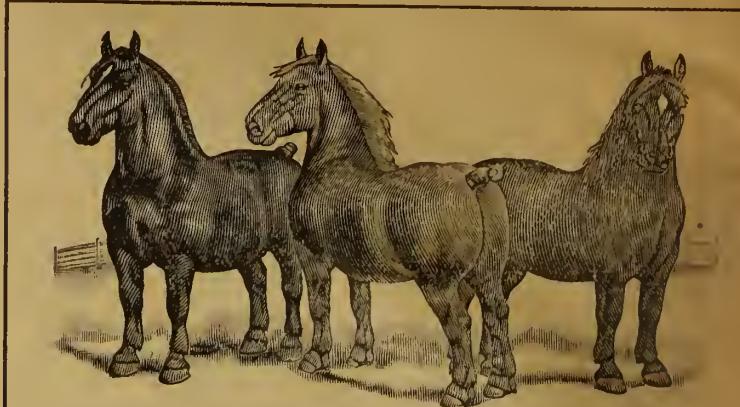
How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer
13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN
NEW YORK
A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humorous Entertainments for Church, Home and Societies, Fan Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....
PEARSON'S MAGAZINE

NATIONAL MAGAZINE

AMERICAN BOY OR.....

PHYSICAL CULTURE MAGAZINE.....

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

Hutchinson's Poland - China Sale

Norton, Kansas, Saturday, March 24, 1906

Part of Our Record

**40 Head of gilts
bred to our herd
Boars**

**Bright Look 21833
Prince Wonder
(Sent for registration.)
Mascot 32888**

Bright Look, first and sweepstakes Inter-State fair at Red Cloud, Neb., as a yearling at a weight of 700 pounds. First and sweepstakes and first on boar and four of his get at Nebraska State Fair fall of 1900 as a 2-year-old weighing 805 pounds. We bred King Look by Bright Look, the greatest breeding hog in the State of Nebraska. Sire of boar 6 months and under 1 year, Just Look 37319, winner of second, and also headed young herd, winning first. Boar under 6 months, Faultless Look 37318, first. Sow 6 months and under 1 year, Sweet Look 88715, first. Sow 6 months and under 1 year, Please Look 88714, fourth. Sow 6 months and under 1 year, Kind Look 88712, sixth. Young herd, under 1 year, first. Four swine over 6 months get of same boar, King Look 24459, second. All won at the Nebraska State Fair, fall of 1905. We bred Guy's Price 26037, winner of first and sweepstakes, at Nebraska and Kansas State Fair in 1903. Caddie Price, is the dam of Caddie Look 58037, litter mate to Bright Look, and dam of Ruby Look 83604, winner of 2d under 6 months at Nebraska State Fair, and litter mate to Hutch 82287, won 2d as a yearling in 1904, at a weight of 680 pounds at 17 months. And the sensational 2 year old at the Nebraska State Fair, weighing 950 pounds, won first in aged herd, third in class. Hutch also sired second premium litter at Nebraska State Fair, 1905. Tecumseh White Face 89670, won first and sweepstakes at Kansas State Fair in 1903. Darkness 89669 won first at Kansas State Fair in 1903.

**40 Head of gilts
bred to farrow in
April. These gilts
are the large
heavy type: The
kind you need in
your herd.**

If you need brood sows that have size and quality: sows that raise litters as large as the Durocs, you should not fail to attend this sale, or to send some bids to C. E. Shaffer, of the KANSAS FARMER. Write for catalogue.

Col. Bert Fisher, Auctioneer.

C. F. Hutchinson, Bellaire, Kansas

**FOURTH ANNUAL SALE OF
REGISTERED HEREFORDS,
BY THE
MARSHALL COUNTY HEREFORD ASSOCIATION
WILL BE HELD AT
Blue Rapids, Kansas**

THURSDAY, APRIL 5th, 1906.

32 HEAD OF BULLS

13 COWS and HEIFERS

45 head of registered Herefords, contributed by the following breeders: Miss Lou Goodwin, Miss Florence Preston, A. Borck, Brown Bros., E. R. Morgan, Cottrell Bros., F. W. Preston, L. P. Larson, Geo. E. Miller, McKee Bros., and W. A. Gilson.

These bulls are good enough to head anybody's herd. All who have attended the annual sales of the Marshall County Hereford Association know the high quality of the stuff sold there.

For Catalogue address

**F. W. PRESTON, Secy.,
BLUE RAPIDS, KAN.**

Auctioneers—Cols. R. E. Edmonson and Others.

DIAMOND CREEK STOCK FARM

Public Sale of

50 Head Standard Bred Horses

AT THE FARM ADJOINING

HERINGTON, KANS., MONDAY, MARCH 26, 1906

CONSISTING OF

**Brood Mares, Young Stallions,
Geldings and Fillies** Ranging from 1
to 3 years old...

Including some of the best stock ever sold in the State. Our leading stallion is Escobar, 2:13 3-4

SALE UNDER COVER. STOCK SHOWN AT ANY TIME PREVIOUS TO SALE

For Catalogue address . . . **J. W. CREECH, Proprietor,**
HERINGTON, KANSAS

We Have on Hand Now a Fine Selection of
IMPORTED

Draft Stallions and Mares

Ranging in ages from 2 to coming 5-year-olds, and weighing from 1600 to 2000 pounds, of the following breeds:

PERCHERONS Blacks, Greys
and Bays

ROYAL BELGIANS Bays, Roans and Chestnuts
with White Manes and Tails

ENGLISH SHIRES Bays and
Brown

OLDENBURG COACH Blacks, Bays
and Chestnuts

Eight Imported Percheron Mares

If you are looking for something good enough to win in any show-ring, we guarantee to show them to you.

One pair of 4- and 5-year-old gray mares, weighing 4000 pounds, both heavy in foal to one of the most famous stallions in France; one pair of matched black 3-year-old mares, weight 3500 pounds, one of them has black filly colt at foot, and the other one will drop a colt within six weeks; one 2-year-old black mare, weight 1,700 pounds, of extraordinary bone and finish; one pair of dark gray yearling mares, weight 3000 pounds, will certainly make a show team; one 2-year-old dark gray mare, very smooth and one that will please you.

Every one of these mares are absolutely sound, and of the most fashionable blood that the old country produces. The prices range on them from \$500 to \$1,000, colts at foot not counted. This is an exact description of them, and we guarantee the mares to please anybody looking for good ones.

Do not write, but get on the first train and come and buy them.

We sell first class stallions as cheap as they can be bought anywhere, and give with them a 60 per cent guarantee, and furnish life insurance if desired. TRY US ONCE.

Watson, Woods Bros. & Kelley Co.
Lincoln, Nebraska

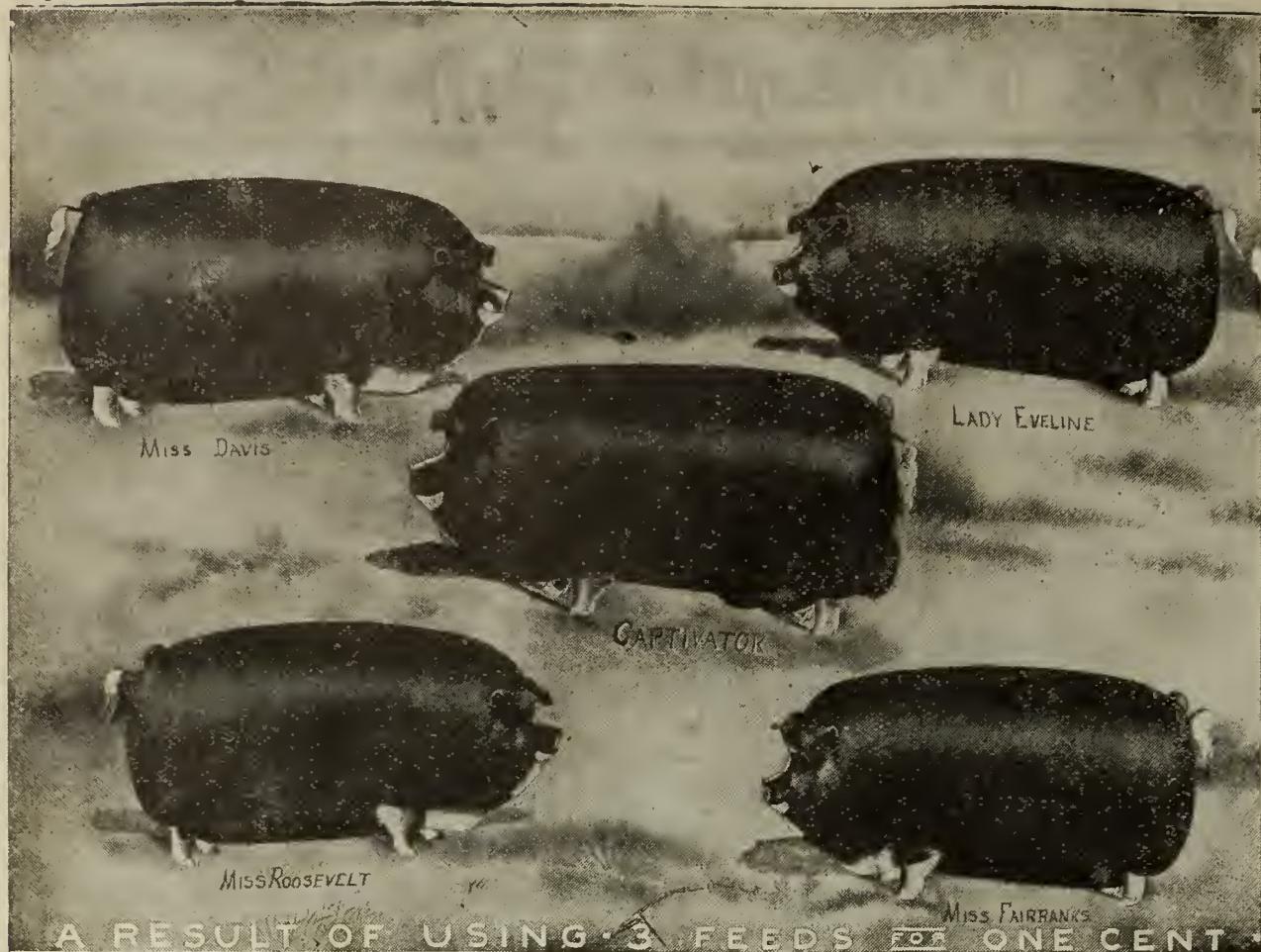
St. Joseph Stock Yards Co.

South St. Joseph, Missouri

A Short Story to the Point—Ship Your Live Stock to St. Joseph and return home well pleased.

Jno. Donavan L. D. W. VanVleet M. B. Irwin

Vice-President and General Manager Assistant General Manager Traffic Manager



"International Stock Food" is prepared from pure, medicinal Roots, Herbs, Seeds and bark and is fed in small amounts as an addition to the regular grain feed. It Purifies the Blood, Cures and Prevents Disease, Tones up and Permanently Strengthens the Entire System and greatly Aids Digestion and Assimilation so that each animal obtains more nutrition from all grain eaten. Endorsed by over One Hundred Farm Papers and over Two Million Farmers and Stockmen. Sold by over One Hundred Thousand Dealers on a "Spot Cash Guarantee" to give you paying results or your money promptly refunded. Dan Patch has eaten "International Stock Food" every day for over three years and you know what he has done. WE HAVE THOUSANDS OF TESTIMONIALS SIMILAR TO THE ONE GIVEN BELOW.

Breeders Who Win Premiums Are the Men It Pays to Follow.

CHARLES E. KELLER, BREEDER OF LEADING STRAINS OF POLAND CHINA HOGS.

INTERNATIONAL STOCK FOOD CO.

Gentlemen:

You will find under separate cover a picture of my Poland China show herd. You will also find enclosed a record of their winnings from World's Fair at St. Louis, 1904, down to the present time. As my hogs were prepared for the show with the use of your "International Stock Food," I thought perhaps you would appreciate the picture as it might prove valuable for your Bulletin, as they have an unequalled show record. At the World's Fair the litter from my great sow, Lena Perfection, won eight ribbons, which is an unequalled record. I also exhibited seven head at St. Louis and won nine money prizes and Reserve Champion. My winnings at State Fairs have been remarkable in show ring history. "International Stock Food" is a great and reliable preparation.

Very respectfully,

CHARLES E. KELLER.

NEWARK, OHIO, Jan. 17, 1906.

DAN PATCH 1:55 $\frac{1}{4}$ IN 6 BRILLIANT COLORS
WITH POSTAGE PREPAID MAILED FREE

We Have A Beautiful, Six Color Lithograph of Our World Champion Stallion Dan Patch 1:55 $\frac{1}{4}$. It Was Made From Photograph And Shows Dan Hitched To Sulky And Pacing His Fastest Clip. It Also Gives All Of His World Records. This Is A Splendid Horse Picture For Framing. It Is The Most Life Like Picture Ever Taken And Shows Dan Flying Through The Air With Every Foot Off Of The Ground. We Will Mail You One Copy Free, Postage Prepaid, If You Write Us And State How Much Live Stock You Own And Name This Paper. Address INTERNATIONAL STOCK FOOD CO., Minneapolis, Minnesota, U. S. A.

GREAT COMBINATION SALE!

60 Thoroughbred Hereford, Shorthorn and Angus Cattle; Duroc-Jersey, Poland-China and Berkshire Hogs

ELK CITY, KAN., SATURDAY, MARCH 17, 1906

BREEDERS REPRESENTED

Hereford Cattle.—Raman Yohe, Elk City; I. L. Swinny, Lafontaine; Samuel Drybread, Elk City.
Shorthorn Cattle.—H. M. Hill, Lafontaine; R. J. Conway, Elk City; B. H. Jeter, Elk City; D. O. Cripps, Elk City; Dunham & Logan, Lafontaine.
Angus Cattle.—G. G. Coleman, Elk City.
Duroc-Jersey Hogs.—W. O. Stephenson, Elk City; G. H. Coleman, Independence; Samuel Drybread, Elk City.
Poland-China Hogs.—J. A. McDowell, Elk City; I. L. Swinny, Lafontaine; R. J. Conway, Elk City.
Berkshire Hogs.—H. H. Miller & Son, Elk City; D. O. Cripps, Elk City.

TERMS OF SALE.—Cash or bankable note for six months, drawing 10 per cent interest.
No postponement on account of weather.

Sale held under cover, rain or shine.

For Catalogue apply to — SAMUEL DRYBREAD, Manager, Elk City, Kans.

TALK
ABOUT
YOUR
HAM

You never tasted meat so sweet and well kept as ham smoked in the new way with Wright's Condensed Smoke. If you have ham, bacon or any kind of meat to cure

WRIGHT'S CONDENSED SMOKE

will cure it perfectly without loss of time or meat. Easy, certain, safe, healthful. Bottle smokes 280 lbs. At druggists 75 cents. Fully guaranteed. Write for "The New Way." Tells ALL about it. The E. H. Wright Co., Ltd., 112 W. 4th St., Kansas City, Missouri.

KRESO DIP
KILLS
LICE
ON ALL LIVE STOCK
EASY & SAFE TO USE


BLUE CATTLE LOUSE
KRESO DIP
KILLS THIS
AND ALL OTHERS
**RED CATTLE LICE,
HORSE LICE, HOG LICE
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS**

Write For Free Booklets
For Sale By All Druggists

PARKE, DAVIS & CO.

HOME OFFICES AND LABORATORIES:
DETROIT, MICH.
BRANCHES: NEW YORK, CHICAGO, ST. LOUIS, BOSTON,
BALTIMORE, NEW ORLEANS, KANSAS CITY, INDIANAPOLIS,
MINNEAPOLIS, MEMPHIS, U.S.A.; WALKERVILLE,
ONT.; MONTREAL, QUE.


A Satisfactory Roof

THE ROOF is the most important part of any building you own. It is the part that requires careful selection of materials if you want to prevent leaks and repair bills. Rust and decay are the two worst enemies of roofing, and the material that will not resist these makes a poor roof and soon causes dissatisfaction.

There is only one roofing that will not rust or decay:

mica-noid
READY ROOFING

We do not ask you to take our word for this only; we have in our office hundreds of letters from persons who have used this roofing for years; we want you to read them.

If you are interested in a roofing that is cheaper in price than tin or shingles and will outlast either, write for a copy of these letters, also FREE samples of Mica-Noid.

Asbestos Mig. & Roofing Co.,
306 Carr Street, St. Louis.

Janes Stock Farm of Williard, Kansas



Will Hold a Public Sale of
34 Trotting-Bred Horses

at the State Fair Grounds, Topeka, Kansas

Thursday, April 3, 1906

The offering includes the herd stallion General Evans 13166 with a record of 2:22 $\frac{1}{2}$ and one of his best sons. The offering comprises standard-bred mares and fillies mostly sired by General Evans.

The stock may be seen at the barns, Willard, Kans., 15 miles west of Topeka, until two weeks prior to date of sale when they will be shown at the Fair Grounds, Topeka, where the sale will be held.

For the catalogue and other information address

H. S. Janes, Herington, Kansas

Auctioneers—Cols. J. W. Sparks and C. M. Crews.



LIGHTNING PORTABLE **WAGON**
and STOCK **SCALE**

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri.

KANSAS FARMER

Volume XLIV. Number 12

TOPEKA, KANSAS, MARCH 22, 1906

Established 1863. \$1 a Year

The National Dairy Show

On February 15, at Chicago, there was opened in the Coliseum, an exposition that was an epoch-marker in the dairy industry of the United States and the world. This magnificent building, which is one of the largest assembly halls in the United States, was filled to its utmost capacity with the exhibits of everything pertaining to the dairy and the dairy industry. Indeed, a large part of the exhibit was of necessity placed in another building because of lack of room in the Coliseum.

This great show was the event of years of waiting and the result of years of working. Such a show has been earnestly desired by those interested for many years and attempts have been made to hold a National dairy show in Madison Square Garden in New York, but they resulted disastrously. The people of that city are not particularly interested in the dairy or the dairy cow, and the enormous expense attendant upon the making of an exhibit that would in some measure be a correct representation of this great industry,

proved too great a burden. Chicago, on the other hand, is in the center of the richest dairy region of the United States, and the Elgin market which is close by, sets the price for all dairy products.

It would be difficult to describe or even enumerate the vast number and variety of objects on exhibition in connection with this dairy show. Attempts have been made a number of times to make provision for the classes of dairy cattle in the International Live Stock Exposition, but without results on account of lack of room. The National Dairy Show, however, included an exhibit of dairy cattle in which Ayrshires, Guernseys, Holstein-Friesians and Jerseys were brought from the United States and Canada to contest for the prizes offered by the management. The entire annex of the Coliseum was used for the exhibit of dairy cattle of which there was a goodly showing of all the breeds named.

Cream-separators were there in abundance. All of the prominent man-

ufacturers of these indispensable dairy machines were represented in handsomely decorated booths and each served to attract its crowd of admirers. The DeLaval Separator Company, of New York and Chicago, had a fine exhibit, included in which were the first two separators sold in America in 1886. This afforded a wonderful object lesson by comparison with the modern and up-to-date pattern of machine. They also showed a new style 700-pound separator run by a small fan motor and one of the attractive features of their booth was a moving panorama showing how the cream-separator pays off the farm mortgage and gives new prosperity to the owner.

The Sharples Separator Company, of Westchester, Pa., and Chicago, made a magnificent showing with forty-eight separators of various sizes and kinds. Present in their booth during a part of the week was the inventor of the tubular machine. The exhibit was in charge of Mr. A. W. Rockwell who was assisted by a number of his hustling salesmen, each of whom did everything in his power to make the visitor at home.

The Empire Cream Separator Company, of Bloomfield, N. J., made a splendid showing. This company is now putting on the market a new-

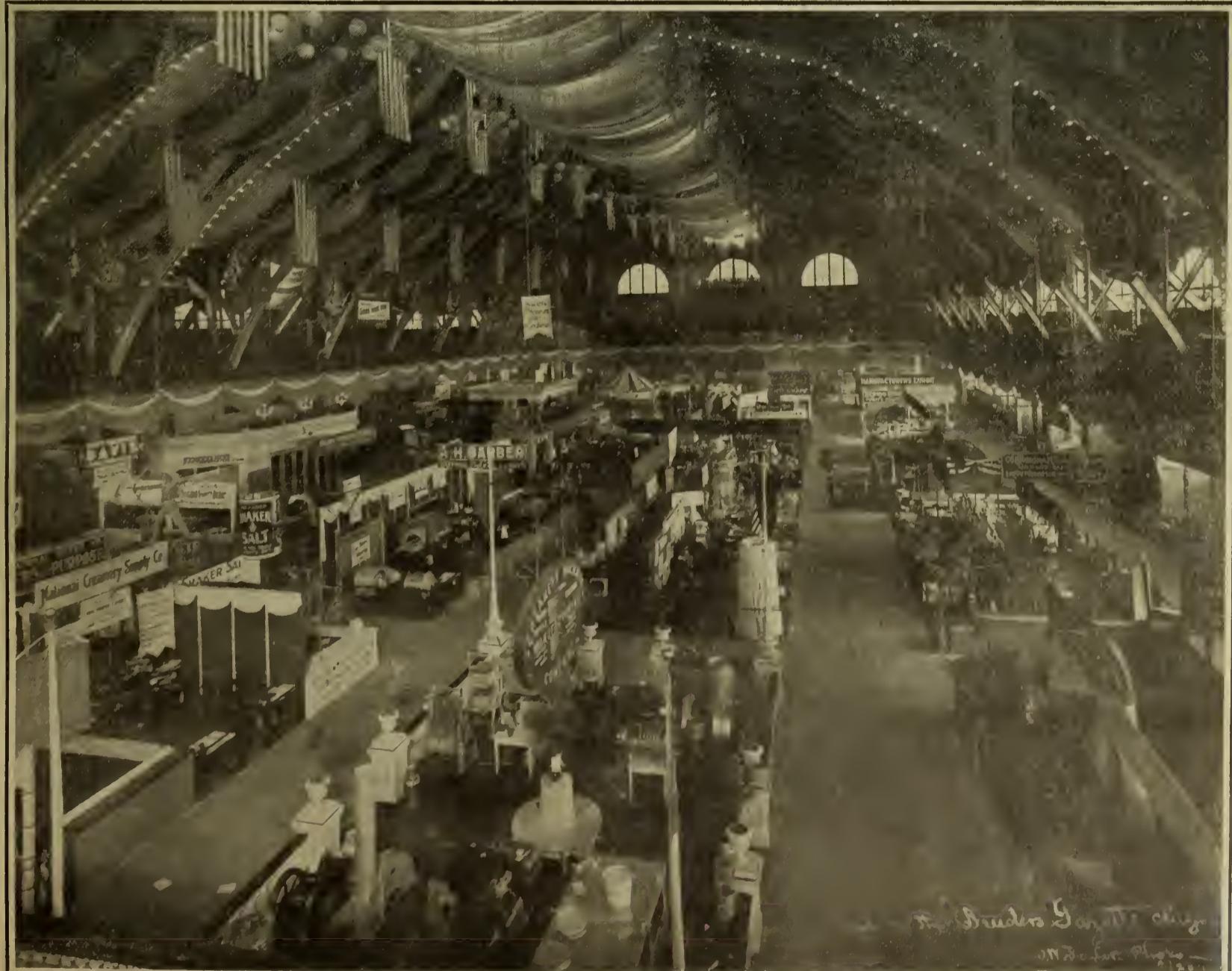
style, frictionless, hand separator which seems absolutely perfect. The name "frictionless" is apt, but the visitor is astonished to see the machine run for thirty minutes after the power has been removed. The new frictionless Empire is bound to be a winner.

The Vermont Farm Machine Company, of Bellows Falls, Vt., had a comprehensive exhibit of United States cream-separators of various sizes, together with tread powers and creamery supplies. The United States cream-separator is a well-known and popular machine, and is one of the mortgage-lifters of the country.

The Omega Separator Company showed four different sizes of their hand separators together with a sectional view of the machine as exhibited at the World's Fair. This proved a very attractive exhibit.

Other separators were shown in their several booths and all proved attractive. A further step in advanced methods of butter-making was shown in the operation of the radiator. This machine makes butter direct from the milk by first separating the cream and then extracting the butter-fat. This is an old idea which is worked out practically now for the first time. Its predecessor was the butter-extractor which

(Continued on page 310.)



Birds-Eye View of Interior of the Chicago Coliseum during the National Dairy Show.

Editorial

WHAT HAVE THE PROMOTERS ACCOMPLISHED.

The year 1905 was a great one for "promotors." Among the various projects in which individuals, especially farmers, have been asked to join and to which they have been asked to subscribe various sums—a dollar and upwards—some have claimed to be able to influence prices of farm products. The official report of the records of prices for the year are not really pleasant reading for some of the more pretentious of the promoters.

The record price for wheat at Chicago for the year was \$1.54 in February. The decline was almost constant until December for which month the top price was 90 cents. The official record closed March 5 at 80 cents.

But perhaps the promoters prefer to consider corn. The Chicago price for corn in March, 1905, was 45½ to 48½ cents; in July it was 53½ to 59. The year closed at 42 to 50½; to March 5 this year the record is 40 to 40½.

Potatoes have done better. The year opened at St. Louis with 35 to 42 cents for January, 1905, and closed at 58 to 66 for December. To March 5 this year the price is 52 to 55.

The promoters have had little to say as to what they would do to the price of hogs. Hogs are given to perverseness—to going the other way, as it were—so that the fixers of future prices have been little inclined to tackle the hog. Well, the hog started in at \$3.90 to \$5 for January, 1905, and closed the year at \$4.50 to \$5.35. He marched nobly up to \$5.90 to \$6.52½ up to March 5, in Chicago.

Butter began 1905, at 28 to 29½ for January. After some fluctuations it closed the year at 24 to 25 for December at Elgin. To March 5 the price was 27.

It is fair to assume that the various schemes whereby prices were to be fixed for farmers, at a dollar and up per farmer, had nothing to do with the general declines.

The KANSAS FARMER has been cordially invited to boom some of these schemes, has been threatened with loss of patronage if it refused. There may be those who will not like the above showing from U. S. Government official records of prices. But the KANSAS FARMER's first duty and purpose is to be true to its readers. It is yet to be shown how any of the schemes so far worked has affected the general markets to the advantage of the farmers. This does not allude to cooperative enterprises which, under honest and capable management, have assisted their members in both buying and selling. These are legitimate business undertakings. But the promoter who claims to be able by some occult methods to influence general prices, and wants pay for exercising his claimed powers—what shall we say of him?

WHEAT CROP OF THE WORLD.

The official estimates of the wheat crops of the world for the last five years are as follows: 2,954,763,000 bushels in 1901; 3,125,227,000 in 1902; 3,221,551,000 in 1903; 3,163,845,000 in 1904; 3,337,748,000 in 1905.

The production by the several grand divisions in 1905 was as follows:

	Bushels.
Total for the world.....	3,337,748,000
North America.....	808,674,000
South America.....	175,120,000
Europe.....	1,790,693,000
Asia.....	456,135,000
Africa.....	41,500,000
Australasia.....	65,626,000

It will be seen that Europe continues to produce more than half of the wheat crop of the world and that her crop is more than double that of North America.

The 1905 crop of North America came from the several divisions as follows:

	Bushels.
Total for North America.....	808,674,000
United States.....	692,979,000
Ontario.....	22,195,000
Manitoba.....	57,500,000
Rest of Canada.....	30,000,000
Mexico.....	6,000,000

The total for Canada is only 109,695,000 bushels.

The largest producer in Europe is Russia with 568,532,000 bushels; France is second with 338,785,000 bushels. Of South America's total of 175,120,000 bushels, Argentina produced 154,420,000.

In a horrible railroad accident in Colorado, a few days ago, about thirty persons lost their lives and a large number were injured. The collision resulted from the failure of a station man to deliver modified orders to a passing train. It is reported that the station

man had been for seventy-two hours on duty and slept as the train passed. Very many collisions result from similar long-continued work of train men. There should be most stringent legal restrictions preventing any such overworking of persons upon whose ability and alertness of mind the safety of users of public conveyances depends.

A VOICE FROM THE PACIFIC.

"Hawaii" is the title of a pamphlet issued by the Hawaii Promotion Committee, Honolulu. It contains plain and evidently conservative statements on the agriculture and agricultural possibilities of the most interesting group of islands of the Pacific. The subjects treated are sugar, pineapples, sisal, bananas, coffee, tobacco, vanilla, dairying, poultry, silk, vegetables, fruits, bees, stock-raising, and rubber. Though lying within the tropics, the islands have, in the main, sub-tropical climates. The term "climates" is proper, for the lands lie at various elevations from sea level to mountain heights with corresponding variations in temperature. The wind blows from the northeast during about 260 days of each 365. This brings much rain on the windward sides of the mountain ranges with which the islands abound, in many cases, and leaves a deficiency on the leeward sides.

Farming in these islands is so different from farming in the grain- and meat-producing sections of the United States, that those who contemplate a change to Uncle Sam's sea-girt possessions in the middle of the Pacific should write to H. C. Wood, secretary, Hawaii Promotion Committee, Honolulu, Hawaii, for full information.

BOYS' CORN CONTEST IN FRANKLIN COUNTY.

As was to be expected the corn-growing contest for boys has received proper attention in Franklin County, Kansas. The Farmers' Institute organization has taken charge. This means that the contest will be a great success. Following is a copy of the Franklin County poster:

BOYS' CORN CONTEST.—About \$300 offered in prizes to the farmers' boys of Franklin County, between the ages of 12 and 18, by the Franklin County Farmers' Institute. Each boy who enters will receive free one quart of pure seed corn. The cash prizes and the number of special prizes insures nearly every boy a good prize; also the experience will be of great value. It's all free and for your good, boys, so send your name and address to the secretary at once and it will be published by the county papers with the others each week. The rules have been published and will be published again, but they are simple and can be easily carried out.

C. W. GREEN, President.

E. P. PENDLETON, Sec'y.

Franklin County Farmers' Institute.

The KANSAS FARMER would like the names and addresses of all boys entered in the contest.

THE KANSAS AGRICULTURAL COLLEGE AT WASHINGTON.

On the evening of March 2, at the Teacup Inn in Washington, D. C., there was held the fifth annual reunion of the Washington branch of the Kansas State Agricultural College Alumni Association. The evening was spent in the discussion of a literary program, games and light refreshments, and a very enjoyable time is reported.

The Kansas Agricultural College enjoys the distinction of having more of its former students and teachers in Government employ than any other institution in the Union, and these reunions are usually attended by more than half a hundred of those who call this great college their Alma Mater.

The following is a list of those who were present: Mr. and Mrs. L. W. Call, Mr. and Mrs. M. A. Carleton, Mr. and Mrs. C. P. Hartley, Mr. and Mrs. C. F. Doane, Mr. and Mrs. W. L. Hall, Mr. and Mrs. L. A. Fitz, Mr. and Mrs. R. S. Kellogg, Mr. and Mrs. J. M. Westgate, Prof. and Mrs. A. S. Hitchcock, Prof. and Mrs. D. E. Lantz, Miss Margaret Butterfield, Prof. G. H. Failyer, Prof. J. B. S. Norton, Prof. Thos. E. Will, Major J. F. Morrison, E. C. Butterfield, F. A. Oakley, Nicholas Schmitz, Harry Umberger, A. B. Gahan, Earl Wheeler, W. R. Ballard.

Upon reading Luther Burbank's article on "How Plants are Trained to Work for Man," printed in "The Youth's Companion" for March 22, one can not help thinking that only a Methuselah could reap the full rewards of his own plant-breeding. The article indicates that the author has already achieved the end aimed at in some of his experiments. On the other hand, many

of them involve so many crosses, such careful selection season after season, that the result of them can hardly be known within the span of three-score years and ten. This contribution to "The Youth's Companion" is said to be the first word that Luther Burbank has ever yet said about himself or his work in print, and it is likely, therefore, to be read with interest by every one interested in horticulture.

THE ADVERTISING.

Do you read the KANSAS FARMER advertisements carefully? They are worth reading. Good advertising matter is a valuable feature in any paper or magazine, and the writer would not take a paper that did not have such advertisements in it. Some of the brightest men in this country are paid high salaries to prepare advertisements and they put brains into their work. Much timely information and many practical suggestions are included in the advertisements, and they are worth reading. You can not afford to skip the advertisements especially such as appear in the KANSAS FARMER. They are clean; they are reliable; and they are interesting. This paper contains no whisky or other objectionable advertisements to go into your home each week in the year with their baleful influence upon your children. The KANSAS FARMER is a clean, wholesome visitor to your homes and brings you each week more of scientific and practical information of value to the farmer and his family, than any other paper. It is a Kansas paper, published by Kansas men, and for Kansas farmers.

SWEDISH BROWN BEANS.

EDITOR KANSAS FARMER:—I enclose you samples of a bean, known as Swedish Brown Bean among merchants. I have looked in vain in seed catalogues for a description that would tally with them. Can you tell me if seed merchants of this country handle the bean? I suppose they do, for the bean does well in some States. How are they designated? I bought a few out of the common stock of a grocery store and planted two years ago, and they did fairly well that year. I would like to try them again this year if I can find reliable seed. E. E. LINDEHOLM.

McPherson County.

The samples sent have been identified by Prof. Robt. E. Eastman, of the Kansas Experiment Station as the "Swedish Brown Bean." They have not been grown at the Station, and are not named in the seed catalogues. Undoubtedly they can be obtained through any of the enterprising seed-houses advertised in the KANSAS FARMER. Cut this notice out and send it with the order.

BLOCKS OF TWO.

The regular subscription price of the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

"The Horseman" promises to present in a midsummer number, a complete history of the development and progress of the trotting horse. This number will be profusely illustrated and will in every respect be in the highest style of the printer's art.

"Forest Belts of Western Kansas and Nebraska" is the title of a valuable bulletin by Royal S. Kellogg, forest assistant of the U. S. Forest Service. Mr. Kellogg is a Western Kansas product, a thorough investigator and a conscientious writer. It would be worth while for the Government to place a copy of this excellent bulletin in the hands of every farmer in the region considered.

Congressman Jones, of Washington, has introduced a bill which provides that the Secretary of Agriculture shall be authorized and directed to investigate systems of farm management and types of farming prevailing in different sections of the United States, the means used for maintaining soil fertility, the methods employed in the production, utilization, and marketing of crops, to conduct demonstrations in improved methods of farming, and to disseminate the information concerning the foregoing, and for this purpose the sum of one hundred and twenty thousand dol-

lars be appropriated, to be available during the fiscal year ending June 30, 1907.

A bill just passed the National House of Representatives providing for increasing appropriations to the several agricultural experiment stations. Under the Hatch bill which was passed in 1887 these experiment stations each receive \$15,000 annually. The present bill proposes to add \$5,000 a year to the \$15,000 and to increase the amount each year until the added appropriation shall be \$15,000, making the total \$30,000 for each station. Well used, such an amount will be a good investment.

The Government free-seed graft by which some Congressmen seem to hope to buy the favor of farmer constituents by sending to some of them, at Uncle Sam's expense, a few cents' worth of garden or flower seeds seems likely to come to an end. The House committee on agriculture has stricken out the appropriation for next year. It is almost past belief that our National law-makers should expect to influence farmers to support them for renomination and election by bribes of a few cents' worth of common seeds. It is even more surprising that they should have consciences so dull as to permit them to pay these petty bribes out of the National Treasury. The Grange and other representative organizations have resolved against the scheme under which, while the bribe sent to a single constituent is small, a large sum is drawn from the public treasury for other than public purposes. The day has arrived when graft, whether large or petty, is disreputable. It is to be hoped that no Kansas Congressman will be guilty of voting for this unwarranted appropriation to buy a few thousand small bribes to be used in his interest.

Voice of the People.

John H. Pugh, Carbondale, Ill.: "Enclosed find \$1 to pay my subscription for one year. On account of so many accounts to meet at this time, I dislike to spare the money, but I would be lost indeed without my paper, the KANSAS FARMER."

J. J. Hysell, of Geneseo, Kans., writes: "I find that by reading and following the instructions in the 'old reliable' KANSAS FARMER I am learning more about farming all the time."

Mr. J. Riblett, Jr., writes: "Please find enclosed check for \$3 to pay on my back subscription to the KANSAS FARMER. I am running a hardware store now but I still get time to read the KANSAS FARMER."

Newton Bros., Whiting, Kans., write: "The KANSAS FARMER is a puller. We have received more inquiries from our card in the KANSAS FARMER than any medium we ever used. We have no Duroc-Jersey bred sows or gilts left and have only 3 or 4 August and September pigs left. Will price them right."

Table of Contents

Alfalfa on prairie sod.....	308
Alfalfa on wheat ground.....	308
Alfalfa, Turkestan.....	309
Ants, uncles and cousins.....	318
Bedtime storybook, the (poem).....	318
Bread.....	316
Bretton, Jules.....	318
Catalpa speciosa.....	331
Cereal crops, the improvement of.....	307
Club, a new.....	318
Corn contest in Franklin County in Marion County.....	315
Corn, yellow vs. white.....	309
Cream, a premium for good.....	319
Dairy show, the National.....	305
Dairy cow, some points in the selection of a modern.....	313
Dairy, why the Kansas farmer should.....	312
Dairy, why you should.....	311
Dairy school on wheels.....	310
Dairy, how we should.....	314
Dairy cows, the breeding and handling of.....	319
Docking horses.....	327
Douglas County Horticultural Society.....	322
End crowns all, the (poem).....	316
Fruits and nuts.....	316
Grandma's story—a talk about dogs.....	317
Grange in Cowley County, the.....	315
Grange, tell us how to create an interest in our.....	315
Holidays, observance of legal.....	316
Japan millet.....	309
Kansas Agricultural College at Washington.....	306
Mutual Helpers, the.....	318
Orpington breed of fowls.....	324
Pacific, a voice from the.....	306
Pasture.....	309
Pigs, care of young.....	326
Pigs, prevent lying on.....	326
Poultry notes.....	324
Poultry pointers.....	324
Promoters accomplished? what have.....	306
Rhubarb.....	322
Sunday-school lesson.....	318
Swedish brown beans.....	306
Uncle Sam at Garden City.....	331
Vegetables, winter.....	323
What have we done to day (poem).....	317
Wheat crop of the world.....	306

Agriculture

The Improvement of Cereal Crops.
PROF. C. A. ZAVITZ, AGRICULTURAL COLLEGE,
GUELPH, CANADA.

The subject of the improvement of our cereal crops is presented under four headings, each of which I consider essential in order to do the best work in the breeding of cereals, namely, the scission of varieties, the selection of seeds, the selection of plants, and the production of hybrids.

SELECTION OF VARIETIES.

I am convinced that the proper selection of varieties of cereals is of great importance, not only from the farmers' standpoint, but also as the basis of work for the improvement of cereals by plant-breeding. After growing and examining over two thousand varieties of farm crops in each of five years, and afterwards observing the behavior of some of those varieties in general cultivation, I wish to emphasize strongly the importance of variety in this work. As some breeds of live stock have been bred for many years to fulfil certain purposes, so have certain varieties of farm crops been raised for long periods of time with different objects in view. Some varieties are well adapted to rich, loamy soils, others to heavy clay land, and still others to soil of a light character. For instance, in Ontario, it would be unwise to grow the Joanette oats on a light, weak soil, or the Black Tartarian oats on a rich bottom-land. It would be equally unwise to grow the White Wonder peas on a poor soil or the Prussian Blue variety on land which naturally produces a large amount of straw. The best results could not be expected from growing the Turkey Red wheat where the crop is apt to lodge, or the Black Hullless barley on rich alluvial soil. Decidedly better results can be obtained from growing the Longfellow corn in Northern Ontario and the Leaming variety in Southern Ontario than if this order was reversed. Many greater yields can nearly always be expected from the Siberian than from the Black Tartarian oats; from the Dawson's Golden Chaff than from the Surprise winter wheat; from the Mandcheurl than from the Common Six-rowed barley; from the early Britain than from the Golden Vine peas; from the White Wonder than from the common, small, white, field-bean, etc. Certainly great differences exist between different varieties of grain crops in length of straw, strength of straw, susceptibility to rust, and quality of grain, as well as in yield per acre and in many other respects. In regard to the yield per acre, there is a very great difference in different varieties. For instance, we have grown a number of varieties of oats and barley under uniform conditions in each of sixteen years, and, for the sake of illustration, I wish to say that the results of these experiments show an average yield of grain per acre of 88 bushels from the Siberian and of 72 bushels from the Black Tartarian, a difference of 16 bushels per acre per annum in favor of one variety over another. Again, the case of barley, the Mandcheurl gave an average of 70 bushels and the Mansury an average of 59 bushels per acre during the same period of sixteen years. Here we have a difference of 11 bushels per acre per annum between two strains of the six-rowed barley. When we see such marked differences between varieties, we are led to the conclusion that variety has an important place in the work of plant-breeding as well as the practice of the farm. Mr. Hugo de Vries, of Holland, after visiting the noted Luther Burbank last year, wrote an account of his trip, and, among other things, he stated that "as a general rule, it holds true that the results of crossing depend primarily on the selection of the varieties used for that purpose. These indicate the list of possibilities from which the choice and the combinations have later to be made. Outside of this list, very little good is obtained, and then only by accident. This occurs very seldom in 'Burbank's cultures."

SELECTION OF SEEDS.

Within the past twelve years we have done a large amount of very careful work in order to determine the influence of different selections of seed upon the resulting crop. Fresh seed has been taken each year from the general crop of grain grown on the farm, or from seed of the leading varieties of roots and rape as obtained from some of the best seedsmen. The results, therefore, represent simply one

year's influence from seed-selection, but in order to obtain the influence from one year's work of this selection, the experiments have been repeated from season to season, in order to secure a good average of conditions of soil, temperature, and rainfall. For the large seed, none but well-developed grains were selected; for the medium-sized sample, the grains selected were of a uniform character, plump and of medium size; and for the small, none but sound, plump, and apparently good seeds of small size were used. In the selection of large, plump grain, one-half pound of each class was carefully weighed and counted. A corresponding number was then taken of the medium-sized and of the small, plump grains. The different selections were sown upon plots of similar size. Four tests were made annually with the different selections of seed of both the root and the rape crops. Duplicate experiments were conducted, in which the seeds of the different selections were planted separately, and a duplicate experiment was also conducted by dibbling the large, five medium and eight small seeds at each place where it was desirable for a root of a rape plant to grow. The plants were afterwards thinned, leaving one in each place and having the plants of the different selections of each class at an equal distance apart. The results of the duplicates of each method were then averaged and afterwards those of the two methods were averaged together. It will therefore be seen that the results of all the selections with roots and rape are those of four distinct tests made in each of the years in which the experiment was conducted.

	Number Yield of crop per acre		
	of years	Large	Medium
tests	seed bu.	seed bu.	seed bu.
Grains:			
Oats.	7	62.0	54.1
Barley.	6	53.8	50.4
Spring wheat.	8	21.7	18.0
Winter wheat.	6	46.9	40.4
Field peas.	6	28.1	23.0
	Tons	Tons	Tons
Field Roots:			
Mangels.	5	33.2	29.6
Sugar beets.	5	22.9	21.9
Swede turnips.	5	17.1	15.2
Fall turnips.	4	25.4	21.7
Field carrots.	5	24.5	22.2
Rape:			
Rape.	5	17.4	15.0
			12.4

From the figures here presented in tabulated form, it is most interesting to observe the marked influence of one year's selection of seed on each of the eleven different crops here enumerated. The large, well-formed seeds produced stronger and more vigorous and more productive plants.

In other experiments along similar lines, we have obtained better results from plump as compared with shrunk seed; from sound seed as compared with that which was injured in the process of threshing; from grain which was perfect in comparison with that which had sprouted in the field; and from seed which was thoroughly ripened in comparison with that which was harvested while it was still immature.

An interesting experiment has been conducted for thirteen years in succession, in a systematic selection of seed oats. The selections were made with large, plump, black seeds and also with light-weighting and light-colored seeds. The test was commenced in the spring of 1893, by selecting seed from the general crop of the Joanette black oats of the previous year. The selection made in each of the following years was from the product of the selected seed of the previous year. The selections each year were composed of an equal number of grains and were sown on plots of uniform size. As the selection for this experiment has been continuous, selecting the seed each year from the crop produced in the year previous, the average results are of but little value, but the yearly results are interesting, valuable, and quite suggestive. In the crop produced in 1905, it was found that the large, plump seed produced 65.5 bushels and the light seed 44.7 bushels per acre. In each of the past few years, the results have been much the same as those for 1905. In weight per measured bushel, the crop produced from the large,

required only 1149 grains to weigh an ounce, while the crop produced from the light seed required 2066 grains to make the same weight. It will be seen from the results here presented, that the selection of the seeds themselves has a considerable influence on the production of the crop and should form a factor in the process of breeding.

SELECTION OF PLANTS.

In the spring of 1903 some very choice grain of six varieties of oats, barley, and spring wheat was selected from the crops grown at the Ontario Agricultural College in 1902. Of each of these six varieties, one-sixteenth of an acre was sown with a grain-drill in the ordinary way; one-sixteenth of an acre was sown with a grain-drill by using every second tube of the drill; one-sixteenth of an acre was planted by hand, placing the seeds eight inches apart both ways; and one-sixteenth of an acre was planted by hand, placing the seeds one foot apart each way. It will therefore be seen that one and one-half acres were devoted to this work in 1903. No less than 9,972 seeds of each variety, or a total of 59,832 seeds of the six varieties, were planted by hand. The four methods of planting were used in order that a comparison might be made as to the best method to use in plant selection. It was found that the grain which was sown with the grain drill, either from every tube or from every second tube, gave a very poor opportunity for plant selection. From grain sown with a drill, heads may be selected, but it is practically impossible to make a satisfactory selection of plants, owing largely to the uneven distribution of the seed. When plants were grown at unequal distances apart, they varied greatly, owing to the relative amount of soil, moisture, and air, furnished the individual plants by the uneven way in which the seeds were distributed in the soil. On a careful examination of the plants obtained from the drilled seeds, it was found that some of them would be separated from all other plants by ten or twelve inches; while in other cases two or three plants would be growing so closely together that their roots and stems would become so much entangled that it was difficult to ascertain whether there was simply one plant, or whether there were two or three or four plants, until a considerable amount of time and labor had been expended in making the examination. It was therefore decided to make a few selections of heads, but not to make a selection of plants from the crop produced from the seed sown with a machine. The grains which were sown by hand, however, gave an excellent opportunity for the plants to grow under uniform conditions. As all plants in each of the two methods of hand-planting were at equal distances apart, it afforded an excellent opportunity for studying the stooling properties, the comparative strength of straw, and the size and uniformity of the heads, etc., of the individual plants. When the crops of each variety on the hand-planted plots had reached the proper stage of maturity, careful examinations were made and the results recorded for reference. After this was done, a few of the very best plants were selected and harvested separately. All of the seed of the most promising plant of each variety was sown in the spring of 1904, and nearly all the grain produced in 1904 was sown in the spring of the present year. A number of the other choice plants of each variety were also selected and harvested separately, and afterwards the best seed was selected and sown in single rows in the spring of 1904. From those strains which gave the best satisfaction in 1904, a sufficient amount of seed was selected and sown on uniform plots in the spring of 1905, and the yield and the quality of the crops produced were carefully recorded. The results so far are encouraging. A statement of a few of the records are here given.

INCREASED STOOLING PROPERTIES.

The crops grown from the seeds, planted one foot apart each way, showed the following average number of heads per plant from the selected seed in 1903, and from the seeds produced from the selected plants in 1904, to be as follows:

	Average number of heads per plant.	
Six-rowed barley (Mandcheurl).	10.8	13.5
Two-rowed barley (Chevalier).	26.3	31.7
White oats (Siberian).	13.6	18.4
Black oats (Joanette).	27.6	46.9

plump seed weighed 35.5 pounds and that from the light seed 24.3 pounds. It is interesting to notice that the crop produced from the large, plump seed

As the seeds were planted exactly the same distance apart in each of those two years, it is quite probable that the influence of the selection made

FENCE STRONGEST MADE. Built strong, tight. Sold to the Farmer & Whole-saler. Price, Fully warranted. Catalogue free. COILED SPRING FENCE CO., Winchester, Indiana.

LAWN FENCE Made of Steel. Lasts a lifetime. We have no fence. Said to never Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue free. KITSELMAN BROTHERS, Box 399, Muncie, Indiana.

PAGE QUALITY Begins in our factory. There's where the first tests are made. Quality of wire first, then a practical weave. You get both in Page Fence. Let us tell you how Page-Wire is made, and how it differs from common fence wire. PAGE WOVEN WIRE FENCE CO., Box 7868, Adrian, Mich.

IWAN'S POST HOLE AND WELL AUGER Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Three times the work accomplished with an Iwan Auger than with any other. Makes hole smoothly and quickly; empties easily; is very durable. Used by U.S. Govt. \$14.50, 6, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample at special price to introduce. Agents wanted. Inquire of dealers or write direct for particulars. IWAN BROS., Dept. Nol, Streator, Ill.

\$10.00 Sweep Feed | \$14.00 Galvanized Grinder We manufacture all sizes and styles. It will pay you to inquire. Write for our price list. CURRIE WIND MILL CO., Topeka, Kansas.

SCALES ALL STYLES LOWEST PRICES
30 DAYS FREE TRIAL
CATALOGUE
AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

CEMENT FENCE POST or Building Blocks WITH THE Crouch \$10 MACHINE Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free. Ellsworth Crouch, Oakland, Kansas.

Am well pleased with the Auto-Fedan as it saves lots of time and money. We can bale at least one-third more, it works faster and easier and there is no danger at all. S. E. Grimes, Wakarusa, Kans.



Satisfaction guaranteed. Manufactured by the AUTO-FEDAN
MFG. CO., 1064 Jefferson St., Topeka, Kansas.

EUREKA BOILER or STEAM FEED COOKER Saves half your corn or other feed. Saves labor in feeding. It will steam moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information. John Deere Plow Co., Deaver, Kansas City, Mo.

You Can Thresh at your convenience, when the grain is ready and save stacking, save help and save grain if you use a BELLE CITY SMALL THRESHER.

Good capacity, light, compact, durable, cleans all grains and seeds equal to any. No experts needed. Low in price. Fully guaranteed. Write at once.

Belle City Mfg. Co., Racine, Wisconsin. Box 78.

BIG ILLUSTRATED CATALOGUE FREE

Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the equipment and how to extend oil. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. Wolava always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write once.

SILVER MFG. CO., Salem, Ohio.

The Government of Canada

Gives absolutely FREE
to every settler



160 Acres of Land in Western Canada

Land adjoining this can be purchased from railway and land companies at from \$6 to \$10 per acre.

On this land this year has been produced upwards of twenty-five bushels of wheat to the acre.

It is also the best of grazing land and for mixed farming it has no superior on the continent.

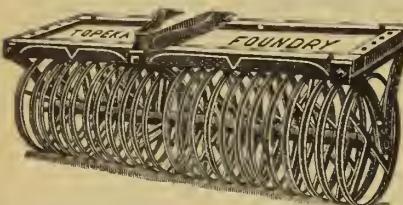
Splendid climate, low taxes, railroads convenient, schools and churches close at hand.

Write for "20th Century Canada" and low railway rates to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper



DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

Two Years Guarantee



AND A BARGAIN

Send direct to our factory for catalog, make your selection (many styles) and we will ship it, freight prepaid, for you to try 30 days. If it doesn't stand the test, if quality isn't high and price low (about half local dealers'), if you are not satisfied, ship it back at our expense.

You Deal With the Factory

when you buy our vehicles. Not a mail order house or agent. And you can buy just as safely from us as from any local dealer. Be sure you send for catalog. We make it all plain there. **We pay the freight.** Address Dept. D. The Apex Mfg. Co., Bloomington, Ill.

Before you buy that Manure Spreader

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive.



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader
has all these important features
and many others equally as important. Write to-day for free catalogue and special prices and terms.

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U.S.A.

In 1903 is largely the cause of the increase in the average number of heads per plant in the crop of 1904, as compared with that of the previous year.

IMPROVED STRAINS OF LEADING VARIETIES OF SPRING GRAINS.

Upwards of one hundred selected strains of leading varieties of winter wheat and spring grains were grown in the experimental plots on uniform plots in 1905. Fifty-six of the plots contained selected strains of spring crops described previously. Some of these strains are promising, as they indicate a greater yield of grain per acre than was obtained from seed produced from plants which had not been specially selected. The table which follows gives the highest yields per acre obtained in 1905 from seed resulting from the plants selected in 1903, as previously described. In comparison with these yields are those produced from selected seed from plants which were not specially selected.

without the introduction of fresh seed from other farms, soils, or localities. At the Ontario Agricultural College, eight varieties of oats and eight varieties of barley have been grown for sixteen years without change of seed. Care has been exercised each year to select the best grain for seed-purposes. The crops have been grown on soil which might be termed an average clay loam, and in no one year out of the sixteen were the crops produced on either a light sandy or a heavy clay soil. The land received no commercial fertilizers whatever, but was manured with about twelve tons of farmyard manure per acre each four years. It has been cropped heavily with grain, dairy train, was greater than the total probably changed but little in its productive capacity. As accurate records have been kept regarding the comparative yields per acre of each variety in each of these years, we are thus in a position to present results for comparison. The following table gives the average yields per acre per annum

	Tons of straw per acre from selected		Bushels of grain per acre from selected	
	Seeds	Plants	Seeds	Plants
Six-rowed barley (Mandscheuri)	1.8	2.0	68.4	78.5
Two-rowed barley (Chevalier)	2.1	2.4	44.8	58.6
Hulless barley (Guy Mayle)	1.6	2.0	47.3	48.6
White oats (Siberian)	2.3	2.1	86.1	91.3
Black oats (Joanette)	2.1	1.9	79.3	89.0
Spring wheat (Wild Goose)	1.4	1.8	29.7	36.4

for each of the four periods of four years each; also the average yield per acre per annum for the whole period of sixteen years:

	Average yield per acre per annum for each of four periods of 4 years each				Av. annual yield per acre for 16 years 1890-1895
	1890-1893	1894-1897	1898-1901	1902-1905	
OATS.					
Joanette	84.8	88.7	84.9	102.4	90.2
Siberian	72.9	83.9	90.4	105.4	88.2
Waterloo	74.3	84.1	85.6	105.9	87.5
Oderbrucker	74.6	85.1	85.8	102.9	87.1
Probsteier	75.7	81.6	88.1	100.3	86.4
Bavarian	70.6	79.9	86.6	103.3	85.1
Egyptian	70.7	71.4	76.4	88.5	76.7
Black Tartarian	67.2	60.5	66.5	91.9	71.5
BARLEY.					
Mandscheuri	60.3	72.2	70.3	76.4	69.8
Oderbrucker	53.1	61.6	68.4	68.9	63.0
Common Six-rowed	50.5	56.7	68.4	68.9	61.1
French Chevalier	54.6	55.8	68.3	61.2	60.0
N. Z. Chevalier	49.6	56.7	68.2	64.7	59.8
Mansury	48.4	53.4	73.9	59.0	58.7
Black Hulless	38.8	39.1	47.5	50.1	43.9
Hungarlan	42.7	34.8	42.2	50.8	42.6

Yield of grain	Yield of crop 1904		Yield of crop 1905	
	Straw	Grain	Straw	Grain
Six-rowed barley (Mandscheuri)	2.3	148	2887	1929
Two-rowed barley (Chevalier)	2.4	112	3265	1119
Hulless barley (Guy Mayle)	2.9	184	2178	2109
White oats (Siberian)	1.6	171	3553	2102
Black oats (Joanette)	1.2	196	8748	3439
Spring wheat (Wild Goose)	1.0	46	542	241

From these results, it will be seen that we obtained in 1905 fully 101 bushels of Joanette oats, 61 bushels of Siberian oats, 40 bushels of Mandscheuri barley, 35 bushels of Guy Mayle hulless barley, 27 bushels of Chevalier two-rowed barley, and 4 bushels of Wild Goose spring wheat, as the direct result in every case from one seed planted two years ago last spring. When we realize the fact that one single grain of the Joanette oats planted in the spring of 1903 produced over 100 bushels of grain in 1905, on about two acres of land, we learn something of the importance of securing even single grains of the highest possible value. In comparison with 100 bushels of Joanette oats, we have only about 4 bushels of the Wild Goose spring wheat under just as favorable conditions. The Wild Goose spring wheat has only a few heads per plant and a comparatively small number of grains per head. The crops which are here reported were greatly admired by thousands of farmers who visited the college and examined the experimental plots in the month of June of the present year.

OATS AND BARLEY GROWN ON THE SAME FARM FOR SIXTEEN YEARS WITHOUT CHANGE OF SEED.

The question of the advisability of making a frequent change of seed from one farm to another is one which has claimed the attention of farmers for long periods of time. It is a problem which is exceedingly difficult to solve; in fact, it is practically impossible to find a solution which will comply with all cases. Any information, however, which can throw light upon this perplexed question should be welcome. If it is necessary to change seed-grain every two or three years in order to keep up the vigor of the plants, the problem of seed-selection is an exceedingly difficult one. We find at the present day a considerable number of the very best farmers who think that good results may be obtained by growing the same varieties on the same farm for several years in succession

The results are very interesting and quite suggestive. Without one exception, the average yield per acre for the last four years is greater than for the first four years for each variety grown during the sixteen-year period. The average results of all the varieties for each of the one-, two-, three-, and four-year periods are given in the same order as the varieties just mentioned. Oats, 74 bushels, 79 bushels, 83 bushels, and 100 bushels; barley, 50 bushels, 54 bushels, 63 bushels, and 63 bushels. It will therefore be seen that the average yield per annum for the last four years surpassed that of the first four years by 26 bushels per acre for the oats and 13 bushels per acre for the barley. The figures here presented show quite clearly that it is possible to grow the same varieties of grain on the same farm for a considerable number of years without change of seed, providing great care is exercised each year in the sowing of the seed and in the handling of the crop.

THE PRODUCTION OF HYBRIDS.

Even though we take great pains in selecting the best seed from the best plants of the best varieties of cereals, we find that the plants produced, although greatly improved in many respects, have weaknesses. We observe that some varieties are specially strong in certain characteristics, while other varieties are equally strong in other features. With the hope of originating new varieties possessing the good qualities and eliminating the weak features of some of the best kinds, efforts have been made to obtain the desired results through artificial cross-fertilization. With the aid of the investigations made by Mendel, de Vries, Correns, Bateson, and others, we are obtaining new light upon this problem which we hope to be able to apply to excellent advantage. In former years when crosses of cereals were made, it was thought necessary to continue growing the crosses for six, eight, or ten years before the varieties became fixed. It is hoped that, with the new

information obtained, more definite results may be secured in considerably less time. At our Agricultural College, we have crossed a few of our best varieties of spring wheat, winter wheat, oats, and barley. The work has been largely accomplished during the last four years. The results in 1905 are certainly very encouraging. We had, in all, about eight thousand hybrids in the past season. In all our crosses, we are working along definite lines with the hope of securing what we are after. As, for instance, we have crosses between the Siberian and the Joanette varieties of oats. Of about two hundred and fifty varieties of oats which we have had under experiment, the Joanette black has produced the greatest yield per acre, has been the greatest stoker, and has furnished grain which is the thinnest in the hull. This variety, however, is very short in the straw and unsuitable for general cultivation. The Siberian variety possesses straw of good quality and grain which is white in color, but the yield per acre is slightly less, the percentage of hull rather more, and the stoking properties not nearly as highly developed as in that of the Joanette. We now have hybrids which are long in the straw, possess good stoking properties, and furnish grain white in color and exceedingly thin in the hull. We hope that these properties may be retained, so that a variety may be secured which will be constant in its possession of the good characteristics obtained from these two prominent varieties of oats. We also have crosses and hope to unite

in the same varieties the good qualities of the Dawson's Golden Chaff and the Turkey Red varieties of winter wheat, the Herison Bearded and the Red Fife varieties of spring wheat, the Mandscheuri and the Two-rowed Chevalier varieties of barley, the common emmer and the red spelt, etc. Although there is a great difference of opinion at the present time as to the outcome of the recent investigations in plant-breeding, we believe, from what we have been able to observe from the work of others and from our own practical experience, that tremendous strides will be made along the line of plant improvement through artificial cross-fertilization within the next few years.

It will be seen from what has already been said, that the work of the improvement of our grain crops in its best form, means careful, systematic work conducted along definite lines and over a long period of time. This is brought about by first selecting the best seed from the best plants of the best varieties, to secure a foundation stock for crossing in order to obtain plants, eliminating as many of the poor qualities and incorporating as many of the best characteristics as can be brought together in any one variety to fulfil a certain and a definite purpose.

Alfalfa on Wheat-Ground.

I would like your advice about sowing alfalfa on a piece of wheat, by harrowing once before sowing and harrowing lightly after sowing. Do you think the wheat will smother it out? I intend to sow about ten acres, and sow 10 pounds of good seed to the acre. Please answer through the KANSAS FARMER.

CHAS. LEIPERSBERGER.

Riley County.

The seeds of alfalfa are small, and even though they may germinate fairly well, the vitality of the young plants is quite low; hence it is more essential that a proper seed-bed be prepared for grasses, alfalfa, and other crops which have small seeds than any of our other crops. I should not think that your field of wheat would be a proper seed-bed for the alfalfa, as it would be liable to crowd the young alfalfa plants too much. If your field was plowed last fall and put into a good physical condition, and if you will harrow the field and seed the alfalfa at once, and cut your wheat crop for hay, you might have fairly good conditions for your alfalfa. However, the wheat

does not appear to be as good for hay as some of our other crops, and I presume that it would not be advisable to seed the alfalfa in the wheat. When you seed a field to alfalfa you expect to let it remain for several years, and a thin or spotted stand is not at all satisfactory. If it is necessary to plow up such a stand, your seed has been wasted; so I would advise the seeding of alfalfa on a carefully prepared seed-bed, either very early in the spring or about September 15 if fall seeding is preferred.

V. M. SHOESMITH.

Japanese Millet—Turkestan Alfalfa.

I would like a little information in regard to Japanese millet. Will it do well in our dry climate? Where can I get the seed, and at what price? Would you consider Turkestan alfalfa better than common alfalfa on upland? Where can I get the seed and at what price? Please answer through your valuable paper.

GEORGE WORTH.

Rush County.

Although the Japanese millet is usually advertised in the seed catalogues as a very productive crop, it has not proved so at this station; in fact, the yields are so low that we have often not weighed the crop because it has been so small and contained so many weeds. Even if the seed germinates well, the plants do not thrive, and it is, according to our tests, not nearly so desirable a type of millet as the German, Hungarian, or Siberian. However, if you wish to seed a small plot of this millet, you can secure seed of any of the wholesale seed-firms in this or adjoining States. The seed costs about 10 cents per pound, or about \$3 per bushel.

The Turkestan alfalfa which was introduced by the U. S. Department of Agriculture from the Highland in Central Asia, is claimed to be a more hardy variety than the common alfalfa and better suited for growing under semi-arid conditions. The U. S. Department of Agriculture recommends this alfalfa as a desirable type; however, much of the alfalfa-seed advertised by our seed-houses as Turkestan alfalfa does not differ from the common variety.

At this station a plot of Turkestan alfalfa, the seed of which was purchased from one of our most reliable seed-firms, and which they claimed to have secured direct from Government importation, has grown successfully, but appears to be not different in yield, or any other respect, from the common alfalfa. Hence, I would suggest that if you try the Turkestan alfalfa you try it in a small way at first, unless good reliable seed can be secured as cheap as the common alfalfa. If you find that you have a more desirable type than the common variety, you can soon secure more seed for seeding larger fields.

Alfalfa on Prairie Sod.

I would like to get your opinion on seeding ten acres of prairie sod to alfalfa. The land is about half creek-bottom, the rest second-bottom. Would it do to break and then disk and work fine with the harrow and sow the seed? If so, would I be likely to get any crop from it this season, or would it be better to seed to millet and sow in the fall? It is usually dry here in the south part of Ellsworth County in the fall. If the millet is put in, can I get a good seed-bed by disking after the millet is taken off? I intend sowing rape for pigs on a lot that has never been plowed but the old sod is dead and the ground is excessively weedy. Can I clean off the weeds and get a seed-bed by disking, or would you recommend plowing? How early can rape be sown in Ellsworth County, and after the crop has been pastured, what crop can I put in to follow it for fall pasture? I find that by reading and following instructions in the "old reliable" KANSAS FARMER I am learning more about farming all the time. I am middle-aged in years, but young in farming. I would like to have my name placed on the mailing list for Experiment Station bulletins.

Rice County. J. J. HYSELL.

As alfalfa-seed is quite expensive and as the seeds are small and the young plants of low vitality, requiring a very thoroughly prepared seed-bed, your plan to break up prairie sod and seed to alfalfa the same season would be impracticable. The new soil to be broken up has a good amount of fertility for growing corn, Kafir corn, or other cultivated crops, and the field would be in a much better condition for sowing alfalfa after it had been cropped a few years. Your plan to sow millet and put the alfalfa in after the millet would be preferable to seeding the alfalfa at once upon new breaking; but it would be still better to seed another field to alfalfa

and plow this up, and in four or five years seed the field that you are about to break.

It is a little early yet for the seeding of rape, so that you will have time to plow your field and harrow it several times to firm it and put it in a good physical condition for seeding; and I think that this would be considerably better than simply disking the field, as I notice that it has never been plowed. Rape may be seeded almost any time from the first of April to the first of August, and if it is possible to divide your lot without much expense, it would be advisable to seed one-half of it about the first of April, and seed the remainder three or four weeks later, and then turn the stock from one lot to the other. If your stock have a large lot which is sufficient to furnish them with pasture, they are liable to allow some of the plants to grow too large, and will continue to eat on some of the newer growth of the others until they are destroyed. The rape may continue to grow and make a fair pasture until late in the fall. If it is mostly eaten off in the summer and does not produce much of a new growth, you may follow the rape by rye, cane or cow-peas for fall pasture, the preference for these depending largely upon your plans for cropping the field the next season, and also upon the nature of your soil. Soil which is inclined to blow or wash during the winter is better protected by a crop which will better survive the winter, such as rye. If you wish especially to increase the fertility of your soil in nitrogen content, the cow-peas would be preferred. These may be seeded broadcast, two bushels per acre; but on account of the cost of the seed, I presume that the rye would be as satisfactory to use for this purpose. V. M. SHOESMITH.

Yellow vs. White Corn.

Kindly inform me whether yellow or white corn is best adapted to this section of the State. Also quote prices on your seed-corn. THOS. DALY.

Bourbon County.

Good producing varieties of either white or yellow corn should succeed well in your section of the State. It appears that on upland soil many farmers prefer to grow a variety of white corn, while certain varieties of yellow corn are considered better adapted for bottom-land. I am of the opinion that this difference in adaptation, if there is any difference, may not be due to the color of the corn, but rather to the variety; for instance, we have found some varieties of yellow corn that were better adapted for growing on our light upland soil than were other varieties of white corn. In your section of the State, the Boone County White or McAuley's White Dent should succeed well.

Of the yellow dent varieties, the Hildreth, Kansas Sunflower, Legal Tender, and Reid's Yellow Dent corn may be successfully grown in your part of the State. If you prefer an early maturing corn, choose the Reid's Yellow Dent, or if a late maturing corn is preferable, the Hildreth or Kansas Sunflower may be recommended. I have mailed a copy of a letter giving some information regarding varieties of seed-corn, with the addresses of the growers. Our supply of seed-corn is practically exhausted.

A. M. TENEYCK.

Pasture.

EDITOR KANSAS FARMER:—In reply to J. N. Hunter, I sowed about ten years ago for pasture, 3 pounds white clover, one bushel Kentucky blue-grass to the acre on cornstalk land, disked and harrowed in March. The freezing and thawing covered the seed. It came up early in the spring and has been a good pasture for hogs and cattle. Crab-grass does not bother this grass as it makes a thick sod. Two years ago I sowed twenty-five bushels of English blue-grass. It came up all right and I commenced to pasture about the first of July. I had a good pasture until frost came. I waited the next spring for my English blue-grass as I wanted the pasture early. I am still waiting and looking. The crab-grass killed out the English blue-grass. I sowed the Kentucky blue-grass and now have a good pasture. N. B. SAWYER.

Montgomery County.

As long as it is grievous to thee to suffer, and thou desirest to escape, so long shalt thou be ill at ease, and the desire of escaping tribulation shall follow thee everywhere.—Thomas a Kempis.

Tranquility of mind will often pilot us through many choppy places.



**WE HAVE ON HAND NOW A FINE SELECTION OF
IMPORTED**

Draft Stallions and Mares

Ranging in ages from 2 to coming 5-year-olds, and weighing from 1600 to 2000 pounds, of the following breeds:

PERCHERONS Blacks, Greys and Bays

ROYAL BELGIANS Bays, Roans and Chestnuts with White Manes and Tails

ENGLISH SHIRES Bays and Brown

OLDENBURG COACH Blacks, Bays and Chestnuts

Eight Imported Percheron Mares

If you are looking for something good enough to win in any show-ring, we guarantee to show them to you.

One pair of 4- and 5-year-old gray mares, weighing 4000 pounds, both heavy in foal to one of the most famous stallions in France; one pair of matched black 3-year-old mares, weight 3500 pounds, one of them has black filly colt at foot, and the other one will drop a colt within six weeks; one 2-year-old black mare, weight 1,700 pounds, of extraordinary bone and finish; one pair of dark gray yearling mares, weight 3000 pounds, will certainly make a show team; one 2-year-old dark gray mare, very smooth and one that will please you.

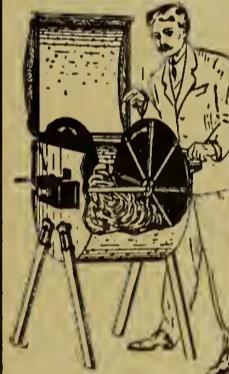
Every one of these mares are absolutely sound, and of the most fashionable blood that the old country produces. The prices range on them from \$500 to \$1,000, colts at foot not counted. This is an exact description of them, and we guarantee the mares to please anybody looking for good ones.

Do not write, but get on the first train and come and buy them.

We sell first class stallions as cheap as they can be bought anywhere, and give with them a 60 per cent guarantee, and furnish life insurance if desired. TRY US ONCE.

WATSON, WOODS BROS. & KELLEY CO.

LINCOLN, NEBRASKA



Save Your Clothes

By Washing Them in

A Gee-Whizz Washer

SENT ON FREE TRIAL

It would surprise you to know how much wear and injury clothes receive when washed by rubbing between rollers or heavy lids, jerked around by pegs, or in fact by any friction method.

None of this in the Gee-Whizz as it washes by driving hot soap-suds through the clothing with force and speed, by means of water wheels. No friction on the clothes. Guaranteed to wash perfectly clean in from four to seven minutes.

Galvanized steel tank. No warping and no falling apart. Adjustable to wash anything from a napkin to a quilt, or a length of carpet.

Write at once for full particulars and free trial proposition.

Gee-Whizz Mfg. Co., E Walker St. Des Moines, Iowa

Barn Plans and Outbuildings

New, revised and greatly enlarged edition,
Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARN
CATTLE BARN AND STABLE
DRAFT BARN
CATTLE SHEDS
BEEF BARN AND SHED
PIGGERY
POULTRY HOUSE
CARRIAGE HOUSES AND HORSE BARN
CORN HOUSES AND CRIBS
ICE HOUSE

DAIRY HOUSE
CREAMERY AND CHEESE FACTORIES
BREEDING HOUSES
GOAT SHEDS
SMOKER HOUSES
DOG KENNELS
BILGS
ROOT CELLARS AND ROOT HOUSES
BUTCHERS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 6 x 7 inches, 404 pages.

Cloth, price, postpaid, \$1.00

THE KANSAS FARMER CO.

TOPEKA, KANSAS

THE NATIONAL DAIRY SHOW.

(Continued from page 305.)

made butter direct from sweet cream, but which failed because of lack of market for this quality of product. The successful appearance of the radiator on the market would seem to indicate an advanced step in butter-making, though the ultimate result of its appearance is hard to predict.

The National Dairy Show was a wonderful exhibition. Wonderful because of its size, its success, and, more than all, its comprehensiveness. No implement, accessory, or novelty known to the trade was omitted from the exhibits. Every process by which milk is prepared for consumption in bulk, as cream, condensed milk, butter or cheese, was shown in its completeness. In this building the visitor could take his journey from the cow-stable, where the modern methods of sanitation, the feeding of balanced rations, the care of the animals, and the workings of the milking-machine were shown, clear through every operation to the butter-cutter and the automatic scale which delivered the butter to the customer, weighed accurately to the fraction of an ounce, or to the counter where the canned and bottled milk were ready for delivery for the use of the infant or the invalid.

Among the dairy-stable appliances were stock foods, stalls, watering troughs, scales, stanchions, milk-pails and cans, in bewildering array. In addition, there were manure-spreaders, corn-shellers, silage-machinery, and grinders which are accessory to good dairy-farming. There were also various forms of power, including the tread power, gasoline, kerosene, and steam engines, electric- and water-motors. And then the farm telephones, filters, roofing materials, etc., found an appropriate place as accessories on the modern and up-to-date dairy farm. There were also automatic bottle-washers, bottles and bottling-machinery, milk-wagons, butter-colors, boxes and packages, cultures, extracts, sterilizing and pasteurizing machines without limit.

A part of the space in this great building was devoted to the pure-food show. This was made with the cooperation of the Department of Agriculture at Washington. Dr. Wiley, Chemist of this Department, sent an exhibit that was a revelation to most visitors and made each feel sorry for his stomach. This exhibit included the chemical apparatus used in detecting the adulterations in food and drink, and a very large exhibit of adulterations that had been extracted from foods and drinks bought on the open market. One of the most startling features of this exhibit was the samples of cloth stained in brilliant colors with coloring matter extracted from foods and drinks that are daily sold in the open market.

There was a hospital exhibit in which a demonstration was given of the methods of preparing foods for invalid infants. Nearby was a cooking-school exhibit of great interest, while a little farther down the line was an exhibit made by the United States Army commissary department, in which was shown a complete collection of the prepared food-rations provided for use of the soldiers when in the camp, the fort, or on the march. A camp kitchen was in daily use and luncheon was served to invited guests at noon. Those who were fortunate enough to receive invitations were unanimous in their statements that Uncle Sam's soldiers are well-cared for in the matter of food.

In connection with this great show was held the National Creamery Butter-Makers' Association meeting. This meeting was very largely attended, much larger than ever before. Indeed, it furnished the opportunity for the show, but the latter proved such a success that we venture the prediction that hereafter the show will furnish the opportunity for the Butter-Makers' convention. There was held also at this time, the National Dairy Farmers' convention, which had a large attendance from many different States and from Canada, and the last convention of the week was the Pure-Food convention which was also largely attended. These meetings were held in the large hall over the Annex where the cattle were stabled.

It is significant that the United States Department of Agriculture and the agricultural colleges of several States gave such large assistance in making this show a success. The agricultural colleges of Kansas, Missouri, Illinois, Indiana, Ohio, Pennsylvania, Nebraska, Minnesota, New York, and Guelph, Ont., were all represented by professors in charge, a number of whom contributed valuable papers to

the meetings and did everything in their power to add to the interest of the occasion. Kansas did herself proud by sending fifteen students from Professor Erf's Dairy Husbandry Department of the Agricultural College as well as Professor Erf himself, who read a valuable paper at the meeting.

The great objection to dairying as a life business and the one which, more than any other, prevents many farmers from engaging in it, is the necessity for milking the cows by hand and the difficulty of obtaining the right kind of help. It has been the dream of inventors for years that some kind of a milking-machine could be made which would remove this objection to the most profitable branch of agriculture. Milking-machines have been in use for several years but they seem not to have arrived at perfection and their use has not become general. In one corner of the cow-stable in the Annex of the Coliseum, was shown the latest milking-machines in daily operation. This machine seemed to do its work well and to the comfort of the cows. During the week a newly-calved Guernsey heifer was milked quietly and with apparent comfort by this machine while attempts to milk her by hand had been resented by vigorous kicks. This machine is operated by the application of power to a pump which compresses the air and draws the milk from the udder. The only objection that could be raised to the machine lies, not in its work, but in the difficulty of keeping it clean. Long rubber tubes connect the suction cups which surround the teats, to a central receptacle and it is possible to milk a number of cows at the same time with one machine. If this machine can be kept thoroughly clean, it would seem that a very long step in advance has been made for the dairy industry. One dairyman of Wisconsin was so pleased with the machine and its operations that he ordered ten of them for use in his home dairy.

In spite of the small accommodations available in the Annex, and in spite of the fact that none of the breeders' record associations gave financial assistance to the show, except only the Holstein-Friesian Association, the cattle show was a success. Cattle were shown from Canada to Kansas, though some of those who made entries were prevented from shipping by reason of sickness. The show was so successful that it is sure to be continued.

The success of this show as a whole has induced the management to change the name from The National Dairy Show to The International Dairy and Food Show. This change was induced more perhaps by the exhibits of dairy cattle from Canada and by the wonderful exhibit of pure food shown by the Department of Agriculture and other exhibitors, than by any other reason.

One of the interesting features of the show was a large booth fitted up in very attractive style by Swift & Company in which was shown milk-fed chickens, both alive and dressed, ready for shipping. A capable cook was in attendance who fried these chickens from time to time and gave the visitors samples. Visitors were unanimous in pronouncing the flavor excellent and different from anything before tasted.

Taken altogether, the National Dairy Show was a wonder. It was interesting to the city people as well as to those from the dairy farms. It was a straight business exhibition with no frills or spectacular features. The booths were nicely decorated and the general view of the large Coliseum was attractive, but each exhibit was specially arranged for its educational value and not for mere entertainment or amusement. The city man and woman in attendance had open to them a new world about which they may have read, but of which they could know little or nothing by observation or experience.

It is a matter of pride that the establishment and the successful issue of this initial dairy show, were due entirely to the efforts of two Kansas men, Mr. James A. Walker and Mr. W. W. Marple, were president and vice-president respectively, and to them and them only, is due the wonderful success of this wonderful exhibition. Both these gentlemen are well known to Kansas people by reason of their connection with the Blue Valley Creamery Company, formerly of Marysville, Kans., but now of St. Joseph and Chicago. Their energy, ability and money made the show possible, and to them is due all praise.

THE DAIRY SCHOOL ON WHEELS.

As the days go by the magnificent results accomplished by the Kansas State Dairy Association special dairy



Washed in 1 minute

A Big Difference

One Minute's Washing as compared to at least fifteen. Wouldn't you like to save at least fourteen minutes twice a day? **One minute** with a cloth and brush cleans the absolutely simple Sharples Dairy Tubular Cream Separator bowl shown in the upper picture. It takes fifteen minutes to half an hour with a cloth and something to dig out dents, grooves, corners and holes to clean other bowls—one of which is shown in lower picture.



Washed in 15 to 30 minutes

Cream is Cash

AT

The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business. Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in cash.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.

PEERLESS CREAM SEPARATORS

Reasons Why the PEERLESS is the best

FIRST—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

SECOND—Compound feature, two bowls in one, hollow bowl and disk bowl combining all the features of the tubular and disk machines.

THIRD—Enclosed frame. Free from dust. Injury resulting from machine impossible.

FOURTH—Perfectly noiseless.

FIFTH—Heavy enough and strong enough to lift a box-car, which insures durability.

SIXTH—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-1000 of an inch.

SEVENTH—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the PEERLESS machine. Each busing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at a small cost.

EIGHTH—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent butter fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

Bradley, Alderson & Company

10th and Hickory

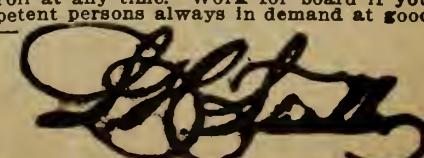
Kansas City, Missouri

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for board if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

- Bookkeeping
- Shorthand
- Civil Service
- Telegraphy
- Penmanship



TOPEKA BUSINESS COLLEGE, TOPEKA, KAN.

train over the Santa Fe Route from Atchison, Kans., to Superior, Neb., are made more manifest. Nearly 4,000 farmers were enabled to hear the lectures which were given by men of State and National reputation. For nineteen years the Kansas Dairy Association has held annual meetings in different cities of the State, but was never successful in drawing together any considerable number of farmers. It is estimated by those in a position to know, that the number of farmers who attended the meetings on the special dairy train, was greater than the total number brought together in all of the eighteen preceding annual meetings of this Association. It is also stated on the highest possible authority, that the number of farmers in attendance upon these lectures on the train, was larger than the total number brought together by the annual meetings of the dairy associations of Michigan, Wisconsin, Iowa, Illinois, Indiana, Missouri, and Nebraska, combined.

The idea of the dairy train was conceived by Secretary I. D. Graham, and its success was due to his forethought and careful management, backed as he was by the Santa Fe Railway Company.

A report of the proceedings of the dairy train, together with the resolutions adopted at the annual meeting at Abilene on Saturday after the termination of the trip, were published in the KANSAS FARMER of March 8. We now take pleasure in presenting our readers with synopses of the lectures delivered on that train. These will appear as fast as space will permit.

Why You Should Dairy.

Address by W. W. Marple, of Chicago, delivered at various points on the route of the Kansas State Dairy Association Special Dairy Train over the Santa Fe Route, Feb. 27 to March 3, 1906.

It is certainly a privilege to talk to you on a subject that is of such vital importance and one in which I am so deeply interested.

You are certainly to be congratulated on living in a community through which a railroad runs, operated by a corporation sufficiently interested in the development of the resources and in the people who live along its line, to come to them with a fund of information such as they have on this occasion.

You are to be congratulated on living in a state where there is a state institution such as you have at Manhattan, and where the officials of that wonderful institution are so much interested in the development of agriculture throughout the state.

It is of very great importance to the man who is contemplating some line, as to why he should dairy. There are a number of reasons, all of which are feasible and true. It is a difficult matter to decide which one of these reasons is the strongest and most important. A very strong reason, and probably the most attractive, is that it pays more than any other branch of agriculture. The reason that it pays is that it forces into use an element in our make-up that is most valuable; it compels us to use a force that we have that brings the highest price under all circumstances; it gives us an opportunity for using our mentality and it is this element in our make-up that, when placed on the market, brings the highest price. A man may have a collegiate education; he may be an artist of renown; he may be thoroughly posted on all the arts and sciences and yet be only worth about a dollar a day for digging a ditch.

Whenever he engages in any line or pursuit that gives him an opportunity to use his brain, he puts himself in a position to realize the greatest returns for his efforts.

The young man who has been dissatisfied on the farm in other lines, finds this business attractive because it not only returns to him speedy results, but returns them in cash. Under other circumstances, he has been forced to wait a full year to know what he has realized and whether he is going to realize anything for his labor and his time and his effort. In dairying, he gets immediate results; if he is advised to use a certain feed for his dairy, he can tell in forty-eight hours whether that advice is good or not, while if he is advised to use a certain kind of seed for the production of a certain kind of grain, he has to wait a year before he knows whether his advice was good.

It is possible for him to increase the results from his dairy by carrying out certain plans and adopting certain rules and he gets this increase right away. There is no limit to what he is able to accomplish through the influence of a system brought about by the exercise of his mind force. He can keep books, he can balance his accounts every day the same as a bank, and with these

opportunities, the business continues to grow more fascinating, and where once he hated the humdrum life on the farm, it becomes attractive to him and he is disposed to remain there.

I really do not know that it is necessary that any other reason should be given as to why we should dairy, but there are others and in the few minutes that have to talk to you, I want to enumerate some of them.

There is probably nothing we are so much interested as our own homes. In the busy, active walks of life we are glad to retire to the seclusion of our home, let it be ever so humble, and it is there that we get our satisfaction and perfect rest. We are interested in beautifying and adorning these homes and making them as attractive as possible. While our special interest is in our own home, in a general way we are interested in all the homes in the country in which we live. A man travelling over the country in a balloon, if dropped down blindfolded and his blindfold removed, if in a dairy country, would recognize it as such at once. The general appearance of the country, including the good houses, good roads, good barns, kept-up fences, and all those things which add to the beauty of a rural district, are evidenced, and the cause is plain. There is every inducement in the dairy country to do this. 'Tis not only true, but the highest state of cultivation exists there. The productiveness of the dairy farm is far in excess of that of any other. This is a very prominent reason why we should dairy.

I believe that we have no more right to take from the soil its fertility and leave it in a depleted condition for the next generation, than we have to take the oxygen from the air that we expect them to breathe, and in consequence, make it impossible for them to live any length of time. The land that we occupy, while we may have a deed to it, is not ours; it is only loaned to us, and it will be transferred to someone else when we are through with it, and that will be in a comparatively short space of time, and it should be the one object of our lives to turn that over to our children in as good condition as we found it. It would be an utter impossibility to do this were we to continue to raise grain year after year. There is no other business in which you can engage that can bring about this effectually but dairying.

There are many reasons why we should dairy but none why we should not.

The placards that are hung around this car are full of wisdom. There is one that says:

"A carload of corn is worth \$250. A carload of butter is worth \$5,000. Convert your corn into butter and save the freight on 19 cars."

The manufacturer studies economy and adopts those means by which he can produce the finished product and get it to the consumer for the least amount of money. There is no question but that to reduce corn to butter is decidedly the cheapest method of getting the product of your farm to the highest priced market.

There is another placard which says: "The dairyman leaves his children a better farm than he got. The grain raiser does not."

This is true. A man at Marshfield, Mo., bought a farm at \$5 an acre. This had been cultivated in grain for years and produced an average of about 15 bushels of corn an acre and about 6 bushels of wheat. He has had this farm ten years and has done extensive dairying. Last year his corn crop was an average of 75 bushels to the acre and his wheat crop 25 bushels. His farm is worth at least \$30 an acre and this result and these conditions are brought about by the manner of business that he has engaged in. He has been returning to the earth the fertility that it has been robbed of for years.

In conclusion, to sum up the reasons why we should dairy: it is pleasant business; it is profitable business; it is an attractive business to those who are engaged in it; it makes better farms more attractive homes; a more fascinating country and a better people.

Why We Should Dairy.

Address by Hon. Ed. H. Webster, Chief of Dairy Division, Bureau of Animal Industry, United States Department of Agriculture, on the Kansas State Dairy Association Special Dairy Train over the Santa Fe Route, Feb. 27 to March 3, 1906.

There are a number of important reasons why the Kansas farmer should engage in the dairy business. The first among these is the natural adaptability of the country to dairying. Few sections furnish such an abundance of cheap feed as can be produced on Kansas farms, and few can grow the feeds

WORLD'S BEST BUTTER

DE LAVAL SEPARATOR TRIUMPH AT NATIONAL DAIRY SHOW

The great DAIRY SHOW and NATIONAL BUTTER-MAKERS' CONVENTION held at CHICAGO, February 15th to 24th, awarded ALL HIGHEST BUTTER PRIZES to entries made from DE LAVAL SEPARATOR CREAM, the prizes and the scores being as follows:

GRAND PRIZE—GOLD MEDAL

A. CARLSON, Rush City, Minn. Score 97

SILVER MEDAL

J. E. HOWE, Oakland, Minn. Score 96½

SILVER CUPS

E. J. SIMONSON, Milton, Wis.	Score 96
W. H. BECHTEL, Caro, Mich.	Score 96
LOUIS NIELSON, Camp Point, Ill.	Score 96
F. L. ODELL, Greenfield, Iowa.	Score 95½

Out of the total 610 butter entries 559 were DE LAVAL users, the other 51 representing the users of all other separators combined, while of the 496 entries scoring 90 and over, 463 were DE LAVAL made, the other 33 covering all competitive users together.

All this is in keeping with what has happened at every previous Convention Contest of the National Buttermakers' Association since its organization in 1892, all highest awards having been made, without exception, to DE LAVAL users.

While in evidence of the recognition of DE LAVAL superiority by the best buttermakers everywhere, it is important to note that the proportion of DE LAVAL made entries has never been less than 85 per cent, and at the present Great Show was over 91 per cent of the total number.

A DE LAVAL catalogue, gladly sent for the asking, will help to make plain WHY under like conditions DE LAVAL cream produces butter superior to that which can be made in any other way. Write for it to-day.

The De Laval Separator Co.

RANDOLPH & CANAL STS.,
CHICAGO.

General Offices:
1213 FILBERT STREET,
PHILADELPHIA. 74 CORTLANDT STREET

9 & 11 DRUMM STREET,
SAN FRANCISCO.

109-113 YOUVILLE SQUARE,
MONTREAL.

75 & 77 YORK STREET,
TORONTO.

1416 PRINCES STREET
WINNIPEG.

Get the Cream

GET IT ALL. GET THE LAST DROP. BUY DIRECT FROM THE FACTORY AT FACTORY PRICES AND SAVE

20% to 50%

It's to your interest to know about the liberal selling plan of the

Davis Cream Separator

No other skimming device known so surely gives you all the cream, and none does it with so little work. It is absolutely the simplest and easiest running separator. Only 3 pieces in its bowl. Think of the ease of keeping such a bowl clean. It never can get out of balance. The tank is only belt high, no high lift. You should know all about the Davis. Investigate before you buy. Write to-day for money saving catalog No. 125.

DAVIS CREAM SEPARATOR CO.
540 North Clinton St., Chicago, Illinois.

ing the soil, builds it up. It adds nitrogen and humus to the soil, and although large crops can be removed from two to four times a year the soil gradually becomes richer in these elements. A dairy farm will gradually become richer year by year, while a neighboring farm on which is grown wheat or corn to be sold from the place, will in time become so exhausted that these crops will not pay.

Another reason why dairying should be of interest to every farmer, is that by converting the crops grown on the farm into the finished product, an added profit can be obtained. The dairyman of the East and of the South has practically to feed crops worth from two to four times per unit value of the same crops on Kansas farms, and yet these crops can be fed to dairy animals profitably, and butter sold in the same markets in which the Kansas product finds its outlet. The farmer who grows alfalfa and corn and ships it East to the dairymen, allows that dairyman to have the profit derived from manufacturing this cheap product into a finished article. The Kansas farmer should think of this and convert all such crops, possible into the finished product on his own farm.

Another reason why dairying will more and more appeal to the Kansas



Nothing knocks out and
disables like

Lumbago and Sciatica

Nothing reaches the trouble
as quickly as



TRADE
MARK

St. Jacobs Oil

Known the world over as

The Master Cure for Pains and Aches

Price, 25c. and 50c.

farmer is that land is appreciating in value and methods of farming must be found that will pay the interest on the investment. Land is bound to increase in value as the years go by. The public lands have been exhausted and the young man of to-day must buy a farm and pay a good round price for it. He must of necessity follow different methods of farming than were followed by his father who homesteaded 160 acres in the early settlement of the State. In countries where land is very much higher than it is in the United States, dairying has been found to be one of the most profitable industries on such lands. The farmers of Denmark, Northern Germany and the Islands of Guernsey and Jersey are valued at \$500 to \$2000 per acre, and dairying is practically the only business that can be entered into on a large scale, which is profitable on such a high-priced land. In our own country the high priced lands of Iowa, Illinois, and Wisconsin are almost invariably dairy sections of those States. The famous Mohawk Valley in New York is world-renowned as a dairy section. In this valley, lands are very high in value. One can go only a few miles from this valley and find the abandoned farms of the East. These farms are abandoned because dairying was not a feature of agriculture on them. Thus it is worth while for the Kansas farmer to consider that with the constant increasing value of his lands, means must be taken to rearrange his farming operations in such a way that he can make not only a living, but will be laying up something for a rainy day on the investment which he finds himself the possessor of.

Another encouraging feature in dairying is the fact that it brings in a constant, steady income. The farmer who raises hay or grain or feeds cattle has but one period of income during the year, and he must arrange his work accordingly. He can never tell at the beginning of a year what his income for that year will probably be. Adverse climatic conditions may come and crops may fail; the cattle market may go down and apparent profits be turned into loss. But with a good dairy herd on his farm he is assured of an income at least once a month, and in many cases oftener than this, throughout the entire year. This enables him to regulate his expenditures according to his income, and keeps him out of debt.

One of the features which is encouraging about the dairy business is that the presence of a dairy herd on the farm does not necessarily mean that the farmer shall stop growing wheat or corn, or any other crop, for sale, but dairying fits in nicely with these occupations and insures a steady working income to carry them on. In cases of this kind when crops fail, the farmer still has his living, and if he has a wisely-selected herd, more than a living.

The occupation of dairying gives constant employment throughout the year to labor. This to some farmers is an objection to business, but if they would view the matter in the light that any business man would a proposition of this kind, they would readily see that steady employment is the only means by which the most value can be obtained for the labor employed. The hired man who works three months or six months of the year and then has to seek another place or another occupation for the balance of the year, is

never as good a hired man as the one who can be assured twelve months steady work at a fair income. The merchant or other business man who would try to run his business on principles that seem to prevail among many farmers, would find himself bankrupt at the end of the year. He from necessity must stay by his business every working day of the year. As land and labor become higher in price, the farmer will see that he must follow a similar method in the management of his own affairs and so regulate his farm operations that he can give labor constant employment throughout the year, and use it in such a way that it will be profitable to him.

The last reason I wish to mention why dairying should be of importance to the Kansas farmer is that it requires a better man to be a dairyman than to follow almost any other line of agricultural pursuit. When the farmer secures for himself a herd of cows and begins to study their needs and the kind of crops to grow, the kind of stock to own and how to feed this stock in order to get the maximum amount of milk; when he begins to study the selection of animals, to eliminate the poor members from his herd and to study how best he can market his products, he is engaged in a business that is going to make him a broader man in every way; he becomes a more intelligent and better citizen in the community in which he lives. One has but to look over the general condition of things in our own country to see that this is practically a matter of fact. In localities where some single crop has been for generations the one mainstay of the farm, one does not find the high grade of intelligence among the farmers as he does where the farmer has engaged in some branch of the live-stock industry, and I believe that it can be said without contradiction that the better developed dairy sections of our country are also better developed along other lines; they stand for better things in political and social life; they have better homes and are educating their children to become better citizens.

For these reasons and others that I have given you, it seems to me that the Kansas farmer should carefully consider the question of dairying as one of the important industries that should engage his attention.

Why the Kansas Farmer Should Dairy.

Delivered by Prof. E. W. Curtis, Kansas City, on the Kansas State Dairy Association Special Dairy Train.

There are two classes of farmers in Kansas to whom these remarks can be addressed: The farmer who is handling beef cattle, keeping his cows for the purpose of raising the calf, and the grain farmer.

Speaking to the former class, it is well that we take account stock of just where we are in the cattle-raising business. It is wise in any line of business, for us to stop occasionally, inventory, and figure out our profits and losses.

The Kansas farmer who keeps a cow a year for a calf, must figure about as follows: If he hires it done anywhere in the State, it will cost him \$8 to winter a cow. It will cost him on an average of \$3 to summer her. The interest on the money invested in the cow is at least \$2. He will average through blackleg or other causes at least 10 per cent losses on calves after they are born, which figures at about \$1.50. Not over 80 per cent of the cows will calve each year on an average, which figured out will increase the cost of keeping his herd at least \$2 per head, which makes a total cost to keep a cow one year \$16.50. These are actual and fixed charges and he is not taking into consideration the fact that year by year the cow is growing older and less valuable.

We would like to ask any farmer how much he received for calves last fall, or how much those calves would be worth, should he want to sell them. He will tell you that steer calves were worth on an average of \$15; and the heifer calves on an average of \$12 and we believe it is very conservative figuring indeed, to say that the average calf in Kansas was worth last fall not to exceed \$13.00.

Many stockmen will tell you these figures are entirely too high. Accepting them as true, however, it shows that the Kansas farmer who is keeping cows for their calves, is losing at least \$3 per head; and we know thousands of Kansas farmers who are keeping a bunch of cows year after year and wondering why the cattle business is not profitable.

Speaking now to the Kansas grain farmer, we want to call your attention to a series of reasons as to why dairying would be more profitable.

(1) Dairying will take less fertility

from the soil than any other class of farming. We believe every farmer in the State wants to deliver his farm to his children as rich in fertility and as valuable in productive power as it was when he first began farming it. We especially desire to call your attention to the amount of fertility you are taking from the soil if you are raising any of the following crops:

Wheat	8.63
Corn	6.80
Oats	7.88
Sorghum or Kafir-corn grain	5.94
Hay	6.00
Cream	1.00
Butter	.50

Figures furnished by the Department of Chemistry, Kansas State Agricultural College, Manhattan, Kans.

In other words, you are taking \$8.63 worth of fertility from the soil in every ton of wheat which you haul away. This ton of wheat will sell for less than \$20, whereas, a ton of butter selling for \$500, takes but 50 cents worth of fertility from the soil.

(2) Cream and butter are condensed products. Nothing can be made or grown on the farm which brings as much per pound. Farms remote from market, and communities far from railroads, can send their butter to market, or their cream to the creamery with the least possible expense. Hardly any other farm products can be loaded a hundred to a thousand dollars worth at a time, upon a wagon, and drawn to a shipping point so readily as can butter. The dairymen can condense tons of fodder and crops grown on the farm into dairy products, and send them to market in a compact and portable form.

(3) Butter is a finished product. It is made ready for the consumer, either in the private dairy, or the cream can be shipped to the large creamery concerns, who can probably manufacture it more economically than on the farm.

Much that is produced on the farm is raw material, and must be manufactured or otherwise prepared for use after leaving the farm.

(4) Dairying brings in a constant income. The man who sells crops of any kind has to wait until he can market his products once a year. There is little satisfaction in this. It is unbusinesslike to go without cash fifty-one weeks of the year and then have a lot of money come in at one time. The dairyman has an income nearly fifty-two weeks in a year.

(5) Dairying gives constant remunerative employment. The grain or potato grower must spend a large part of the year in enforced and demoralizing idleness, but the dairyman finds profitable work throughout the year, and his work is most profitable in the winter time.

(6) On the dairy farm the work is better divided. The grain harvest comes so close to haying that it often gets mixed up with it to the detriment of both; but where corn is grown and put into the soil for dairy feed, and not so much or no grain raised, the harvests are several weeks apart. Then in winter dairying, there is a let up in the dairy work at the busiest season of the year on the farm, while the dairy needs the most work when other farm-work is lightest.

(7) Skill and brain work get better pay in dairying than in any other branch of farming. To produce fine dairy products requires something besides hard work. The dairyman must have knowledge and skill of dairying. These are required in breeding and feeding dairy cows, and in handling dairy products. And the care bestowed and the skill exercised pay better in hard cash, than they do in other branches of farming.

(8) There is more room at the top, greater opportunity to improve than in any other farm-work. Cows produce from 150 to 500 pounds of butter per year, and the butter sells from 10 cents to one dollar per pound. No other branch of agriculture shows anything like this or gives such a chance to rise.

(9) Taking the country through, there is no kind of farm-work so well suited to women and children as dairying.

(10) Dairying leads to thoughtfulness for the comfort of animals, and thus tends to morality. There is something demoralizing about horses. Men who work in horse stables are rough as a rule, but cows have an opposite influence. To do her best, the cow must be made as comfortable as possible in every way. She will tolerate no neglect or cruelty. She is a teacher of gentleness and kindness.

(11) Dairying is the most progressive branch of farming. Some of the changes for the better that ten years have brought, are the Babcock test, the improvements in separators, etc.

(12) Dairying pays better than any other branch of farming, both actually

HOSPITALS CROWDED

MAJORITY OF PATIENTS WOMEN

Mrs. Pinkham's Advice Saves Many From this Sad and Costly Experience.

It is a sad but certain fact that every year brings an increase in the number of operations performed upon women in our hospitals. More than three-fourths of the patients lying on those snow-white beds are women and girls who are awaiting or recovering from operations made necessary by neglect.

Every one of these patients had plenty of warning in that bearing down feeling, pain at the left or right of the abdomen, nervous exhaustion, pain in the small of the back, pelvic catarrh, dizziness, flatulence, displacements or irregularities. All of these symptoms are indications of an unhealthy condition of the female organs, and if not heeded the trouble may make headway until the penalty has to be paid by a dangerous operation, and a lifetime of impaired usefulness at best, while in many cases the results are fatal.

Miss Luella Adams, of Seattle, Wash., writes:

Dear Mrs. Pinkham:-

"About two years ago I was a great sufferer from a severe female trouble, pains and headaches. The doctor prescribed for me and finally told me that I had a tumor and must undergo an operation if I wanted to get well. I felt that this was my death warrant, but I spent hundreds of dollars for medical help, but the tumor kept growing. Fortunately I corresponded with an aunt in the New England States, and she advised me to take Lydia E. Pinkham's Vegetable Compound, as it was said to cure tumors. I did so and immediately began to improve in health, and I was entirely cured, the tumor disappearing entirely, without an operation. I wish every suffering woman would try this great preparation."

Just as surely as Miss Adams was cured of the troubles enumerated in her letter, just so surely will Lydia E. Pinkham's Vegetable Compound cure other women who suffer from female troubles, inflammation, kidney troubles, nervous excitability or nervous prostration.

Mrs. Pinkham invites all young women who are ill to write her for free advice. She is daughter-in-law of Lydia E. Pinkham and for twenty-five years has been advising sick women free of charge. Address, Lynn, Mass.

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,

Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.

P. O.



PURE BRED

Strawberry Plants

My spring 1906 catalogue is ready and will give you prices on plants from \$1.50 to \$4 per thousand. A postal will bring it to you.

C. D. HORNBECK,
Admiral, Kan.

FOR SALE

At a bargain, one Davis No. 3 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

and prospectively. Look at the prices of farm products. The prospect is poor for many products, but butter is high in all markets.

There is no business which holds out more inducements to the young people on the farm. It is adapted to a wider area of country than any other agricultural pursuit. Noxious and fungus diseases cause less injury to grass, alfalfa and corn than any other farm crops, and these three are the great dairy foods. The future to the skillful dairyman is full of promise and hope.

With such facts as these before him, I think the farmer who is puzzled to make both ends meet at present, must get down and do some hard thinking. One of the first things that strikes many, is that such a profitable branch of business must soon be overdone. If he was in possession of all the facts, however, he would not think so. There is a greater unfilled demand for butter to-day, than there was ten years ago, and this, notwithstanding the fact that butter is higher now than at that time and many times as much of it is made. The supply grows fast, but the demand grows faster.

Families who formerly used one pound, now use three in the same length of time, and those who ate almost none, now have discovered that it is a cheaper and better food for young and old than meat.

The fact is right here in a nutshell, that any farmer who takes up dairying for a business, and follows it intelligently, using the best tools and implements for his work, will have profitable, prosperous, continuing business so long as he may follow it.

Some Points in the Selection of a Modern Dairy Cow.

Delivered by Prof. Oscar Erf, Chief Dairy Department, Kansas State Agricultural College, on the Kansas State Dairy Association Special Dairy Train.

A modern dairy cow as she exists is artificial. She is to a large extent the creation of man's hand. She is the triumph of mind over matter, and, such being the case, there is a natural tendency in the modern cow to retrograde. In the breeding of live stock there is no such thing as standing still. We either progress or we go backward. Therefore, it is necessary that we must breed to an ideal and have the proper knowledge of what this ideal should be.

It is probably best that we take up some points of what should indicate the modern dairy cow. There are many who claim that the broad forehead and the large eye are indicative of large nervous force, but we have found that some of the modern dairy cows with a straight, long head have as good nervous force as those having great, broad foreheads. But I have never yet found a cow with a small nasal organ and a small jaw, that was a good eater. Since man develops her for the purpose of turning food into milk, it is quite essential that she be a good eater, and a good eater is almost universally found in a cow with a large, strong jaw.

I like a cow with a long, slim neck, which is known as a "ewe" neck, one that drops down and comes up about her withers. A fine, thin neck is as a rule an indication that the cow will not put fat on her back, which on the market is worth from three to five cents a pound, but rather convert the feed into hutter-fat in the pail, which is worth from 18 to 30 cents a pound. A short, jumbled-up neck generally indicates, if the cow is from a large milk-producing family, a large flow of milk at flush, but when she is far along in lactation the feed will go onto her back.

When we find a cow that slopes down from her shoulders and down from her legs-taking her from her withers and looking backwards toward her belly-and widens out into a wedge shape, it indicates a continuous flow of milk.

We must bear in mind that the ordinary cow in the country is a robber. She robs her owner during the last four months of lactation, of the profit that she has made in the first six months. This is particularly true of the Kansas cow. The right kind of a cow is one that will pay her way after she has been milked for six months. The average cow of Kansas produces a little less than 100 pounds of fat per year. It requires about 175 pounds to pay for the care and feed of the cow. There are a great many cows that produce from 200 to 300, and even 400 pounds of fat per year. Such cows become exceedingly profitable, but the great problem with the average farmer is to find these particular animals. I know there are many farmers who do not keep records of their cows, that will point with great pride to the fact that this cow gives 20 to 30 quarts of

milk, or even 40 quarts of milk at flush. I do not care anything about this. The point I want to know is whether this cow will in a year give six, eight, or ten thousand pounds of milk. We do not keep our cows for what they give us in their flush.

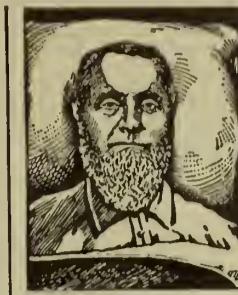
The large flow of milk is generally attended with a large expense of production. The profitable cow is a cow that is persistent in giving a large flow of good, rich milk. That is the cow that we all want to look for, and that is the cow that we want to own. Now, what I am attempting to describe, as I have said, is not the cow that at flush gives a large flow of milk, but the cow that shows by the year's record the largest flow of milk. I am not attempting to go into the question of how much fat this milk contains. There is no indication known to science or to practical methods to show what the fat in the milk will be. This is more or less of a breed characteristic, which is the nearest indication that we can reach. There are some well-known breeds that have a fairly large percentage of fat in the milk. For me or for any other man to describe what constitutes or what indicates by the appearance of the cow that she gives rich milk would be ridiculous. The best way to determine this is by means of the Babcock test. This machine will determine the richness of the milk, the real money value, no matter whether the cow has a rich colored yellow ear with soft skin, or whether she has a rough hide with thick skin, and I have observed cows with this latter characteristic that produced extremely rich milk.

The cow should have a large abdomen. The abdomen is the god of the cow. It is the place where the feed is converted into blood, which finally is made into milk. Take a cow with a great, deep abdomen, and it is presumed that she has the capacity to take her feed and turn it into milk. Never buy a long, lank cow with no belly. She is a fraud and a delusion. The cow that has the habit of turning her food into milk throughout the year will have a long, deep, wedge-shaped paunch.

The udder is another important point of which one should take due notice, and it is somewhat deceiving. The udder should be large and full. I believe that the greatest mistake that we make to-day in judging dairy cows, is to judge them with full udders. I believe that it is a legitimate plan to judge the full udder and then turn the cow away to be milked, and then again examine the udder to determine whether soft or flabby, or if it is fat, and base the conclusion on this fact that a good udder must shrink to a great extent.

Taking all things into consideration, select the cow that has thin withers, ewe neck, high hip bones spread wide apart, wedge-shaped pot belly, the pot belly being especially essential, and you will have a fine dairy cow. Examine her flow of milk and the milk vein. The younger the cow is the less is her milk vein developed; the older she is the more it is developed. I do not like a long-legged cow. Do not select a cow that has a habit of putting fat on her back. You want a machine, and you want to educate that machine to do your work. It is not within the power of man to make that machine do its work properly in one generation. It must be a matter of continuous breeding to fix a given habit in the cow. Some one might ask, "How are you going to do that?" "I do not possess these high-priced thoroughbred cows. I am not fixed on my farm to maintain the thoroughbred cow." Now I will say to the man who can not put into his herd the thoroughbred breeds, buy a thoroughbred bull. It matters not if it is a Jersey to supply butter, a Guernsey to supply the rich-colored milk, an Ayrshire to give a good flow of milk, or the Holstein to give a large flow, get a thoroughbred bull. Never pick one that is scrubby because he can not with any surety fix the blood or type.

As was stated first, the modern dairy cow is artificial. The bull that comes from this modern dairy cow is artificial. There is a natural tendency of the bovine race of all breeds to revert to their ancestors. There is always a tendency to go back, which naturally complies with the law of correlation, and for this reason we want to use nothing but thoroughbred bulls. Many people believe that because an animal is registered there is a guarantee that he is the sort of a bull to use, but this is a false idea. Unfortunately, with due respect to the herd-registers of this country, the fact of registration guarantees nothing but purity, except



I CURED MY RUPTURE

I Will Show You How To Cure Yours FREE.

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you. Write to-day. Capt. W. A. Collings, Box 109, Watertown, N. Y.

GOOD ROADS

Do You Want Them?

You can have them for nothing except labor

COME OUT AND HEAR D. WARD KING

tell about his Split Log Drag and
How to Make a Good Road

Olathe	March 26	Coffeyville	April 2
Wellsville	March 27	Independence	April 3
Ottawa	March 28	Chanute	April 4
Iola	March 29	Lawrence	April 5
Girard	March 30	Emporia	April 6
Erie	March 31	Topeka	April 7

After the meeting, a practical demonstration of the workings of the device.
A FREE MEETING—The Santa Fe defrays the expenses incurred in this good-roads educational campaign. It won't cost you a cent to attend the meeting.

A. M. ASHCRAFT'S Public Sale of Shorthorns

AT ATCHISON, KANSAS, APRIL 10, 1906

42 HEAD

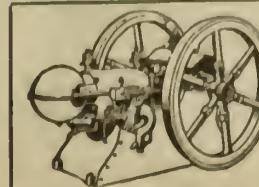
27 choice cows and heifers, 15 bulls, short yearlings and 2-year-olds—nearly all by the short-legged Scotch bull Harmony's Knight 28509, and are of the same type as their sire. The cows and heifers are all dark red, very uniform; all have been reared on the farm and are all in calf to the good Scotch bull Scottish Minstrel 234970 by Imp. Scotch Mist.

Free conveyance from Carter's Livery Barn to farm
where sale will be held

Auctioneers: COLS. GEO. P. BELLows, HARRY GRAHAM, JOHN DAUM

Send at once
for Catalogue

A. M. Ashcraft, Atchison, Kan.



LIGHTNING GASOLINE ENGINE

STATIONARY AND PORTABLE, 3 TO 25 H. P.

NEW PLAN FOR COOLING CYLINDER

Reduces Water Tank to a Few Gallons
Send for Catalog.—Special Farm Engines

KANSAS CITY HAY PRESS CO., MILL ST., KANSAS CITY, MO.

**When you buy
WET WEATHER CLOTHING
you want complete protection and long service.
These and many other good points are combined in
TOWER'S FISH BRAND OILED CLOTHING
You can't afford to buy any other
TOWER'S FISH BRAND**

A.J. TOWER CO. BOSTON U.S.A.
TOWER CANADIAN CO. LTD.
TORONTO CANADA

in cases where the special, authentic record-register is put in, which has been established within the past few years with a few of the leading breeds. This is one of the best things that could be accomplished in connection with the herd-register of each individual breed. No animal is recorded in this registry unless he possesses a superior individuality. An animal from this herd-register means something; and the longer this work is carried on the more valuable it becomes. Take for instance, an illustration. The Isle of Jersey is a little island which is 6 miles wide and 15 miles long. The English people have agents on this island buying all the best cattle each year, and we have men in this country who go to the Isle of Jersey and buy the best that can be found. Understand that the island is depleted year after year, but they replenish the stock and as a rule they continue to improve in the quality of individuals. Why? I think there are two answers to this. One is the ability of the man to breed such cattle. He is a man of heredity. It is a mistake and it is a misfortune in breeding live stock that the son does not succeed the father. In the Isle of Jersey there are families who for generations have been breeders of Jerseys. They have profited by the experience of their forefathers and they keep clear of the pitfalls that their ancestors fell into. The second, and I believe I can not put too much emphasis on it, is that they will not admit into their herd-register any animal that does not possess superior individuality. Therefore, it follows that when an animal is recorded in the herd-book, the fact of registration guarantees more than the purity of the blood. It guarantees the superiority of the individual. Hence, if I wanted a bull to-day to use in a thoroughbred herd, I would not buy him unless I knew his ancestors back three or four or even five generations. Breed him to your best cows, raise the calves, and develop them into cows. Select the best and weed out the poor ones by means of a record of performance which is made by the Babcock test and the scales.

How We Should Dairy.

Address by T. A. Borman, Continental Creamery Co., on Kansas State Dairy Association Special Dairy Train.

The farmer who is producing dairy products is engaged in a manufacturing enterprise just as is the man who makes cream-separators or wagons. It is a notable fact that manufacturers spend a great deal of time and money in keeping a system of records which will enable them to know the exact cost of production, and when this is known, no expense is spared to procure the most efficient help or improved machinery by which they may be able to reduce the cost of the article manufactured. Now since we are operating a cow machine for the manufacture of butter-fat, is it not reasonable that we consider what a pound of butter-fat is costing us? Are we producing this butter-fat at a profit? If only at a small profit how are we to increase that profit? These are pertinent questions and bring us face to face with the conditions we desire to consider.

We Kansas farmers are producing butter-fat under the most favorable conditions. To the left of this train yonder is an alfalfa-field which appears to have yielded luxuriously. To the right is a stalk-field which indicates that Indian corn grows abundantly. On yonder slope the grass is taking on the green of spring. To-day, the sun shines bright and warm. Indeed we are located in a section unexcelled for producing a maximum yield of milk at minimum cost. Our climate is mild; our command are the best and cheapest milk-producing feeds on earth.

lands. We have at our doors the best creameries in the world bidding for our butter-fat. Competition in the purchase of butter-fat is so close these days that we are assured of the full value for all dairy products sold. We could not possibly be better situated than we are. Conditions, aside from the actual feeding and care of the cow which matter rests with the farmer himself, could not be improved. It appears to us as though all the forces of nature had conspired in favoring the very highest development of the dairy industry in this very spot.

Granting that our surroundings are favorable to the production of dairy products at a profit and that the markets afford an adequate value for the product, there are other factors at all times absolutely essential to successful dairying. Successful dairying is the kind which puts dollars in our pockets and is the only kind of dairying we can afford to consider. Those factors are the man, cow and feed.

The man who will make dairying the most profitable is he who will make a study of all the details in the manufacture of butter-fat as does the man who builds hand separators. By this we do not mean that he must spend years in college, although college training will make a man a better dairyman than if he had not had that training. There are no mysteries surrounding the dairy business which should cause the farmer to feel himself not capable of mastering. There is a plain, common-sense reason for every act in the proper feeding and care of the dairy cow. The farmer who would succeed must read, study and observe sufficiently to know what is good dairy practice. There is money and plenty of it in the dairy business for the farmer who will diligently and conscientiously study the cow and her needs. The difference between good and poor dairymen, as between good and poor lawyers, is in proportion to the study and brain power exerted. Unless we determine to improve as we progress, the future has no reward greater than that of the present.

The first essential step toward increased profits is to know what each cow of the herd is producing, and whether or not any cows of the herd are kept at a loss. My observation and experience, as a dairyman and careful student of dairy practice, shows that fully one-half of the cows milked in Kansas are kept at an actual loss to the owner, if these cows were charged market prices for the feed consumed. Fortunately, however, for us, we are able to be very liberal indeed with our cows, because of the fact that they convert into cash large quantities of roughage which does not have a market value and which would go to waste did the cow not consume it. Yet, we must know approximately what it costs to feed a cow and know what are the returns, to furnish a starting point in the improvement of the herd. It is estimated that the average Kansas cow, handled for dairy purposes, is producing probably 100 pounds of butter-fat per year. We have records of a large number of Kansas herds which are producing from 200 to 300 pounds of fat per cow per year. It is doubtful if the cow producing 100 pounds of fat per year is returning her owner a profit for feed and labor, if the cost of each were carefully figured. It is apparent though that the 200 pound cow with butter-fat selling at an average of 23 cents, as was paid by a big Kansas creamery last year, is quite profitable, and the 300 pound cow is a gold mine. In the case of the good as compared with the poor cow, the cost of labor, stabling, taxes, and feed is practically the same. We recall figures of a herd of 20 cows in which the best 5 cows produced an average of 350 pounds of butter-fat per year at a cost per cow for feed of \$17, the feed charged at farm prices, while the five poorest cows in the herd produced only 120 pounds of butter-fat at a cost for feed of \$12. The average of the five best cows was 230 pounds of butter-fat in excess of the average of the five poorest, and the cost of feed was only \$5 greater than of the poor cows. Briefly, this illustrates the difference in herds and cows. I am sure no farmer wants to milk poor cows if he can get good ones. These figures illustrate the fact also, that we have among our common cows many which are most excellent dairy animals, therefore, the improvement of our herds is very largely a matter of selection.

To know the relative value of each cow in the herd, we know of no better plan than the weighing and testing of each cow's milk. This is not such a big job as many farmers think. A pair of spring balances at a cost of 25 cents hung at a convenient place in

the barn and the milk from each cow each night and morning weighed and recorded for a period of three or four days during each of the twelve months of the year, will suffice. A sample of each milking during each weighing period should be taken and this sample either tested on the farm with a Babcock tester, which will cost the farmer \$4 or, the samples delivered to your cream receiving station where the operator can test each cow's sample, will be equally satisfactory. A record of this account kept for each cow, for each month during the year, will give the approximate return of each cow in butter-fat for the year. While the figures given will not be absolutely correct, they will be approximately so and will give the relative position which each cow has in the herd. From this record will be seen which are the cows producing the largest quantity of butter-fat; and we assure every farmer who tries this plan that he will not only be well repaid for his labor and effort so expended, but will be greatly surprised at the showing made by some of the cows which he may have considered as his best cows. There is no reason why the farmer should not try this plan of determining the relative value of his cows. There is no other way known to us by which he can get at the facts other than the plan described. If I should give you any other more simple or reliable plan than this, I certainly would do so.

It will be apparent from the results obtained by a careful test after this plan, that there are cows in almost every herd which are charging their owners three or four times as much money per pound butter-fat as other cows in the same herd. Some of these cows, which charge the largest amount for the butter-fat they produce, will be found very expensive animals to keep. We have found in herds, cows producing butter-fat at as low a cost as 8 cents per pound while the poorest cows in the herd will be charging anywhere from 20 to 25 cents. It is apparent, therefore, that the cow producing butter-fat at a cost of 8 cents per pound is a highly profitable animal, while those charging 20 to 25 cents per pound are running their owners in debt at each milking.

With the scales and test applied to each cow in the herd, we are able to know where we can begin the work of selection. We can, without the slightest hesitancy in the world, so far as injuring our profits from the dairy is concerned, turn into the feed-lot the poorest cows which, we believe, will be in the average herd about one-third of the entire number, and if careful check is made of the returns from the remaining two-thirds, it is our opinion that the farmer will be realizing fully as much money from the milking of two-thirds as many cows as he is milking at the present time. It is a disgrace to the intelligence of our sons, wives and daughters to ask them to milk an old cow which is not returning a profit on the feed and labor. After we have selected the best cows, we should introduce into the herd some butter-fat producing blood, and this can be done either through the use of a male animal from some one of the best dairy breeds or through a common male animal from some cow which is known to be a good milker. We can never grade up our dairy herds by the use of male animals which have been bred for years and years along beef lines. Let us save the heifer calves from the best cows and if the heifers are properly fed and reared from calfhood, they will be cows capable of producing larger quantities of butter-fat than their mothers. We believe it possible to raise heifer calves from our best common cows and a cross of some pronounced dairy strain, which will be at maturity twice as good as their mothers. We are confident that by the proper selection of a male animal it will be possible to eliminate all chances of rearing heifer calves which will not be profitable producers. It is our personal opinion that the grade Holstein cow is the best farmers' cow.

No difference how careful we may be in the selection of cows, unless we feed and handle these cows properly we will be disappointed in the results. Butter-fat is produced only from feed consumed. It requires a certain amount of feed to support the animal body. Everything the cow consumes over and above the feed necessary to support the animal body should, if the cow is properly selected for the dairy, go into the milkpail in the shape of butter-fat. It is necessary, therefore, for a maximum production of dairy products, that we give our cows all the feed they will consume. There is a difference in feed, too. There are cows so fed that they

ON THE LOOKOUT FOR A STEVENS FIREARM

so is your boy. Don't disappoint your boy, and your boy won't disappoint the hawk, should he come looking for trouble around your chicken yard.

If your dealer can't supply you, we send direct, express prepaid, any Stevens shotgun rifle or pistol, on receipt of catalogue price.

The greatest variety of Stevens shot-guns, rifles and pistols that can be seen. It tells how to choose a rifle, test it, sight it and protect it. Sent free for two 2-cent stamps.

1. STEVENS ARMS TOOL CO.
125 High Street
Lancaster Falls
Mass.
U. S. A.

keep in good flesh, but which, so far as milk-production is concerned, are absolutely starved to death. This is the reason why we get no milk or milk of little consequence when our cows are fed exclusively on corn-fodder, prairie grass or sorghum. These feeds, alone, do not contain the proper constituents for producing a large volume of milk. We must know how to feed a balanced ration. It is not necessary that we know technically all about a balanced ration. In this country the best balanced ration we can feed is typified in the use of alfalfa hay and corn chop. These feeds will grow on almost every farm in Kansas, and they are the cheapest and best milk-producing feeds on earth. When alfalfa can not be supplied to the cows in liberal quantities, we are compelled to feed prairie hay, and Kafir-corn or some similar roughage, to supply the protein, which is the chief constituent of alfalfa hay, in the shape of some other feed. Most commonly this feed is bran or cottonseed or linseed meal. We do not believe the average farmer is justified in feeding these expensive feed-stuffs. He should, if he is going to make the most money out of his dairy, by all means supply his cows with all the alfalfa they need. We must have a succulence in our feeds. Alfalfa hay is succulent. It comes nearer being June grass than any other dry feed at our command.

We should not overlook the fact that the crop of corn stalks which each year goes to waste on every farm would, if put into a silo, give us an almost indispensable feed in the dairy. We have gone to the expense of planting and cultivating and producing a crop of corn. In the fall we go through the field and take out the ears and leave on the ground fully thirty percent of the total value of that crop. Substantial silos can be erected at a cost of less than \$1 for each ton capacity. Green corn can be put in the silo at a cost of 50 to 75 cents per ton at the most. Thirty pounds of green, succulent corn-silage makes a day's feed for a cow. Ten acres of average good corn in the shape of ensilage will feed 10 cows from grass in the fall to grass in the spring. Tell me, if you please, how it is possible for us to secure any cheaper feed than this, which in the shape of corn stalks we are now allowing to go to waste on our farms? Tell me, if you please, what building we can erect on our farm for the protection of our grain at any lower cost than the first cost of a silo? The matter of ensilage in this country is a very important one which we have overlooked. Everybody knows that the cow produces the most milk on grass in the month of June. If we are to have a big flow of winter milk, we must supply her with winter feed which comes as near as possible to meeting the requirements of grass. In alfalfa and ensilage we have these feeds.

Let us have our cows come fresh in the fall of the year. During the six or seven months of fall and winter, butter-fat sells at a much higher price than during the spring and summer months. Let us produce butter-fat when it will bring the best price. The full-fresh cow, properly fed and housed, gives a good flow during the fall and winter, and when grass comes in the spring she again increases that flow.

(Continued on page 319.)

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master..... N. J. Bachelder, Concord, N. H.
Lecturer..... Geo. W. F. Gannett, Mullica Hill, N. J.
Secretary ... C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... A. P. Reardon, McLothe
Lecturer..... Ole Hibner, Olathe
Stewart..... R. C. Post, Spring Hill
Assistant Stewart..... Frank Wilzwell Ochiltree
Chaplain..... Mrs. M. J. Ramage, Arkansas City
Treasurer..... Win. Henry, Olathe
Secretary..... George Black, Olathe
Gatekeeper..... J. H. Smith, Lone Elm
Ceres..... Mrs. M. L. Allison, Lyndon
Pomona..... Mrs. S. M. Phinney, McLothe
Flora..... Mrs. S. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman..... Topeka, Station A
E. W. Westgate Manhattan
George Black, Secretary..... Olathe
Henry Rhoades..... Gardner
J. C. Lovett..... Bucyrus

STATE ORGANIZER.

W. J. B. Obryhm..... Overbrook

The Grange in Cowley County.

Arkansas City Grange No. 1432, held its regular meeting in Arkansas City. During the evening the annual installation of officers was held. The Pleasant Valley Grange No. 1416, located at Hackney, Cowley County, was invited to attend and aid in the performance of this beautiful ceremony. The weather being fine, both granges attended in large numbers and the meeting was pronounced by all to be a grand success. After the installation ceremony was completed, Arkansas City Grange served an oyster supper which was followed by a literary program.

We hold our regular meetings on the first and third Saturdays of each month, and confer degrees in the first month of each quarter. At the close of conferring the fourth degree, a banquet is served.

At each meeting some question is presented and discussed, two or more being appointed to lead in the discussion, the other members of the grange expressing their opinions impromptu. Some of the questions that have been proposed for discussion are, "Why should Arbor day be observed?" "Why do we favor National aid for the improvement of the public highways?" and other questions of a similar nature. We have also taken up and discussed the question of the removal of the internal revenue tax of \$2.08 per gallon on alcohol denaturallized, or rendered unfit for use as a beverage, for commercial purposes, and after a discussion of this question at length, resolutions were drawn up and adopted favorable to the removal of the tax, which were sent to our legislative committee, and others who represent us in Congress.

SOPHIA DIEBLE, Secretary.

Tell Us How to Create an Interest in Our Grange.

You can not long hold a grange together by introducing outsiders, one after another, to lecture night after night. No matter how entertaining these lectures may be, the interest must come chiefly from within and must consist mainly in securing some work, or a suitable exercise from nearly or quite every member. The grange is a school for the mutual improvement of every one of its members; and to aid in securing this, it is usually a good plan to elect new officers at least every two years. This plan will interest and educate more. As far as the office of secretary is concerned, the practice suggested is condemned in some States on the ground that some persons are peculiarly fitted for that office and should be retained. The plan adopted by Manhattan Grange, in Riley County, in printing a program at the commencement of the year, and assigning the subjects at that time, is a builder of interest. For the young people, try spelling contests, charades, tableaux, dialogues, dramas, singing, etc. This question of how to create an interest in the grange is a hard one to answer, and nearly every grange must be a law unto itself. The lecturer should be the leader in this matter, and when you find a lecturer fitted for this purpose, keep him. The greatest problem in average subordinate granges to-day, and upon the solution of which, more than anything else, depends the future welfare and success of the order is, how to fairly and properly adjust the balance between the entertainment and educational features of the program. The claims of each

must be duly recognized or failure is certain. The young and light-minded must be made to realize that there is earnest work before them in the world, and that the Grange, properly conducted, is one of the most effective instruments for fitting them for their part in the world's work; while the more mature and serious minded should not forget that sociability, recreation and amusement are essential to the fullest development of human power. Mutual forbearance, concession and cooperation must be conceded to the end that the golden mean be attained.

Scraps of old, worn chamois skin strung on twine, bead fashion, and then tied into a "chamois ball," will last for years and polish glass as nothing else will do.

The Patrons' Cooperative Bank Building in Olathe is completed and furnished and is now occupied. It is conceded to be the best finished and furnished bank building in Eastern Kansas, and the granges of Johnson County feel very proud of it.

The Grange is growing in Coffey County rapidly. Five granges were organized in that county from August, 1905, to January, 1906. New members are being added to these granges constantly, and deep interest is manifested.

Kansas Boys' Corn-Growing Contest in Marion County.

WANTED:—Five hundred Marion County boys to enter this great corn-growing contest.

The Kansas State Agricultural College, through the Farmers' Institute Department, announces a corn-growing contest for Kansas boys. The Institute Department will plan for farmers' institutes to be held between October 15 and December 15 in all counties where contests are held. All local corn-judging will be done by members of the institute staff or by judges selected by the college.

Ten prizes will be awarded in each county contest on exhibits of ten ears in each entry. The Marion County Institute will award prizes as follows: For the best ten ears \$15; second best, \$10; the other eight prizes will be \$6, \$5, \$4, \$3, \$2.50, \$2, \$1.50, \$1, according to rank.

The contest will be limited to farmers' boys between twelve and eighteen years of age. The work must be conducted on a farm, not on a city lot. Each boy will be supplied by the committee with two quarts of seed and must agree to plant it carefully, cultivate it well, and exhibit twenty-five ears of corn raised from that seed, at the county institute and corn contest. With his entry he must submit a brief statement as to date of plowing the ground, kind of land, length of cropping history, methods of preparing for planting, method and date of planting, methods of cultivation, date of gathering his samples, and a statement of number of mature stalks in plot on the first day of August, the number of ears, and the number of barren stalks. Each boy must further agree to attend, if at all possible, at least one session of the county institute.

Of each twenty-five ears, ten will be selected to enter the contest. The entire twenty-five ears to become the property of the institute—the proceeds from the sale of this to form part of the prize fund. Provided—the prize-winners who desire to enter the State contest may retain their best ten ears for the purpose.

All the winners in the county contests will be eligible to enter the State contest—at which the capital prize will be \$100. This contest will be at the Kansas State Agricultural College on January 1 and 2, 1907, under the auspices of the Kansas Corn-Breeders' Association and the Agricultural College. Boys who win in the county contest will be allowed to bring or send the same ears exhibited there, or they may bring a new selection, but from the product of the same seed-corn given out by the committee in the spring for the contest.

Boys in Marion County who desire to enter this contest will send written application to the committee or secretary, stating their preference for white or yellow seed-corn. The seed will be delivered at some convenient point near and the applicant notified. Boys should make application as soon as possible, so as not to be disappointed about receiving seed in March or April. The committee must know how much seed to provide.

(Signed) O. Jolliffe, president; C. F. Stone, vice-president; E. A. Rood, secretary and treasurer, Route 2, Pen body, Kans.; R. Kent, T. L. Furst, R. Kieler, executive committee.

Scrap of old, worn chamois skin strung on twine, bead fashion, and then tied into a "chamois ball," will last for years and polish glass as nothing else will do.

J. C. SIMMONS,
KEEN KUTTER,
TRADE ST. LOUIS MARK
REGD. U. S. PAT. OFF.

Tool Tests

Keen Kutter Tools stand every test of a good tool. You can take a Keen Kutter Hand Saw, bend the end of the blade around until it touches the handle and it will spring back straight and true. Every other kind of a Keen Kutter Tool is as good a tool of its class as the Keen Kutter Hand Saw. The Keen Kutter brand covers a complete line of tools, and every

KEEN KUTTER

Tool is made of the finest steel and made in the best possible manner by expert workmen. This quality tells in actual use—it means freedom from constant sharpening—it means long and satisfactory service. Even in the beginning Keen Kutter Tools cost little more than inferior qualities—in the end they are by far the cheapest tools you can buy. Keen Kutter Tools have been Standard of America for 36 years and were awarded the Grand Prize at the St. Louis Exposition.

Following are a few kinds of Keen Kutter Tools, which your dealer should have—if he hasn't them, write us and learn where to get them. Axes, Adzes, Hammers, Hatchets, Chisels, Screw Drivers, Auger Bits, Files, Planes, Draw Knives, Saws, Tool Cabinets, Scythes, Hay Knives, Grass Hooks, Brush Hooks, Corn Knives, Eye Hoes, Trowels, Pruning Shears, Tinner's Snips, Scissors, Shears, Hair Clippers, Horse Shears, Razors, etc., and Knives of all kinds. Every Keen Kutter Tool is sold under this Mark and Motto: "The Recollection of Quality Remains Long After the Price is Forgotten." Trade Mark Registered.

SIMMONS HARDWARE CO., St. Louis, U. S. A., 298 Broadway, New York.

Real Fence Economy

consists of getting the greatest possible fence value for the money expended. We offer you the best fence value obtainable and here is why we can do it.

We Sell Direct from Factory to the user of the fence. Thus we avoid all unnecessary and expensive handling and storing and cut out all profits and commissions of go-betweens. This makes a large saving. It enables us to spend more for good material and proper construction.

The Continuous Stay is what gives Advance Fence its superior strength. In Advance Fence the stay is never cut but runs continuously up and down across the fence for many rods without an end. Thus we preserve and utilize all the strength of the wire about half of which is wasted in fences with cut stays. Our method of construction costs a little more but it's worth while.

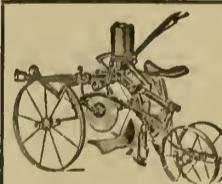
30 Days' Free Trial. Place your order with us for what fence you need and if after examining it you do not like it you can return it at our expense and get your money back. Don't you think this is a fair offer?

We Prepay Freight and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices.

ADVANCE FENCE CO.
3773 Old Street Peoria, Ill.

ADVANCE



The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1810 West 18th Street. - - - KANSAS CITY, MISSOURI

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40
Made of the best Soft Center Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for Extra Share \$1.75 big free catalogue of Riding Plows, Disc Harrows, Listers, Cultivators, everything in the Implement Line; Buggies, Wagons, Harness, Steel Range, Sewing Machines, and a thousand other things sold to you direct at wholesale prices. Write now and get ready for spring work.

12 in Hard Steel
Caster-Couler
With Plow \$1.20 HAPGOOD PLOW CO., 77 Front St., Alton, Ill.
13 in " 1.50 The only Plow factory in the United States selling direct to the farmer.

LIGHTNING PORTABLE WAGON and STOCK SCALE
All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. One pound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri.

Home Departments

CONDUCTED BY RUTH COWGILL.

"The End Crowned All."

Afar in an old cathedral,
A beautiful window stands;
It is made from the useless fragments
That fell from the master's hands.
As he fashioned the other windows
With the art none knew so well,
Nor heeded the humble workman
Who gathered the bits that fell,
And carefully smoothed and polished
The atoms of glass so small,
Though some were dark and blemished.
He used them one and all.
He set them in wondrous pattern,
Each where it shone the best,
And his window, sun-illuminated,
Surpassed, by far, the rest.

From the moments that God has given,
We must make life's windows fair,
But the hues are dull and cheerless
In our seasons of sad despair.
Yet with infinite faith and patience
We can mold those darkened hours
Till they show in the whole mosaic
Only the forms of flowers,
And when, our lifework finished,
God sends his light divine,
In full transcendent glory
Those somber tints will shine.

—A. W.

Observance of Legal Holidays.

As some differences of opinion seem to have arisen relative to the observance of legal holidays, I will add these few lines.

When the legislators of our country set apart Thanksgiving Day, Washington's Birthday, Arbor Day, etc. as legal holidays, they intended that they should be observed as such. What is meant by the observance of legal holidays? Does it mean that on such days school is to be dismissed; the children to go home to spend the day in idleness and mischief; the teacher to spend the day as she thinks best, knowing she will receive her money the same as if she had earned it? It does not. The holidays were each set apart for a specific purpose. Washington's Birthday to learn more about "The Father of His Country;" Christmas Day to commemorate the birthday of our blessed Savior; Thanksgiving Day to give thanks to God for his manifold blessings. Let the teachers all over our broad land prepare literary programs for such days. Let the program consist of songs, recitations, and select readings appropriate to the day, the teachers, pupils, and parents all taking an active part.

A day thus spent will prove a blessing not only to the school but to the whole neighborhood, and the teacher will have the satisfaction of knowing that she has not only earned her money, but that she has been instrumental in bringing before the minds of the people the real object of a holiday.

EDITH MAY KERR.

Stockton, Kansas.

Fruits and Nuts.

There is a new theory for health which possibly goes to the extreme as most new fads do. It is that of uncooked foods. It maintains that cooked foods are dead, and that dead things can not make life. But however that may be, there are many uncooked foods that are healthful and pleasant to taste, that ought to be used more freely. Nuts and fruits have never been fully appreciated as a food, by the masses, but have been used between meals and at bedtime when food was not required, and consequently often caused indigestion; hence they were thought to be unwholesome. In an article on the subject of fruit as food, W. C. Barry says:

"In spite of all the opportunities and advantages we possess, and the cheapness of fruit, how many families fail to enjoy nature's food and nature's cure for many of the ills which afflict humanity. Our preference seems to be to experiment with drugs and to employ remedies which offer only temporary relief at best."

"We have yet to learn the full value of fruit as food. We should cultivate a taste for it, enjoy it, and derive the benefit from its health-giving properties. Every day in the year fruit of some kind should find its way to our tables, not merely as a part of the menu, but obtainable at all times, presented attractively and temptingly if you will, so that it may be partaken of easily and frequently. There are many, perhaps, who have never acquired a taste for fruit and who have little regard for it. To all those we can safely say that they are missing much, and for health's sake, they can not afford to dispense with it."

One can not think of a farm without its orchard and bushes of small fruits. Time is well spent, and space is far from wasted when used for such purposes, especially for an apple-orchard.

The crop is not always sure in Kansas, but what crop is? It is profitable, however. Let me quote from John Burroughs, the naturalist:

"The apple-orchard is sure to bear you several crops besides the apple. There is the crop of sweet and tender reminiscences dating from childhood and spanning the seasons from May to October, and making the orchard a sort of outlying part of the household. You have played there as a child, mused there as a youth and lover, strolled there as a thoughtful and sad-eyed man. Your father, perhaps, planted the trees, or reared them from the seed, and you yourself have formed and grafted them, till every separate tree has a peculiar history and meaning to your mind. Then there is the never-failing crop of birds—robins, finches, king-birds, orioles, red-birds, starlings, and others, such a crop!"

There is the early apple and the late bearer and all kinds in between, so that there is a succession; and it is possible, even without the cold storage, to adorn the breakfast-table with a plate of shiny apples the year round. An apple is a good thing to begin the day with. The Philadelphia Bulletin quotes a physician as saying:

"I know a woman who cured a drunken husband without his knowledge by keeping always a plentiful supply of good apples on the dining table. The man ate these apples and finally stopped drinking altogether." This cure is entirely within the reach of possibility. The same physician advises any one afflicted with the love of drink to "eat three apples a day, and the horrible craving will gradually leave him. The cure will be greatly helped along by smoking as little as possible."

Another editor adds his testimony in favor of the use of fruits:

"Just after eating a good apple, a cigar or pipe will not taste very good. I know, for I have once been a smoker myself. And when you get all the good fruit that you want, especially some of a more acid character, such as apples, currants, lemons, oranges, grape-fruit, peaches, and plums, there will be little craving left for strong drink. Many of our drunkards are made in the kitchen where an excess of greasy food is prepared. Let the cure come through the food also, by adding a free supply of acid fruits to the daily bill of fare."

Let us not despise the Kansas apple. I am reminded of a story I have heard a gentleman tell. He was walking along the street in Cleveland a few years ago, when he observed an overgrown boy examining a bunch of bananas hanging in front of a grocery store. When he came up to him the young man said, "What's them?" When told they were bananas he replied, "Are they good to eat?" He was told that some people liked them. After careful examination of the bunch he said, "Are they any better than our apples?" I do not know how the gentleman replied, but he could have truthfully said of all the fruit, tropical and other kinds, there is not any fruit better or more satisfactory than "our apples."

The value of nuts as food is just beginning to be appreciated. It has been proven that peanuts afford twice as much nourishment as beefsteak, rice, beans, or cheese, and eight times as much as potatoes. Next to the peanut is the chestnut, which contains a great deal of starch and is used largely in Italy, taking the place of cereals and also in the finest grades of macaroni. Chestnuts are used in soup, force-meats, and many kinds of desserts. Almonds are not only nutritious but also a good digester when divested of their brown, tough skin, which is easily done by pouring boiling water over them and letting them stand three or four minutes and then rubbing them off. Then there are the English walnuts, filberts, hickory nuts, and pecans which are growing in favor with cooks for desserts, salads, cakes, etc.

Peanuts used raw, that is, without roasting, are more digestible than otherwise, and the more one eats of them the better they are liked. They are inexpensive as compared with meat, and there is no fear, as in eating meat, of taking something into the system that may be diseased. In addition to the plate of shiny apples on the breakfast table, let us have a dish of unroasted peanuts.

Dainty Foods Demand It

IN EVERY Receipt that calls for cream of tartar, soda, or baking powder, use the Royal Baking Powder. Better results will be obtained because of the absolute purity and great leavening strength of the Royal. It will make the food lighter, sweeter, of finer flavor, more digestible and wholesome. It is always reliable and uniform in its work.

Alum and phosphate baking powders—some of them sold at the same price and some of them cheaper—will make neither dainty nor wholesome food.

ROYAL BAKING POWDER CO., NEW YORK.

Bread.

Yeast should be soaked in tepid water. If the yeast is old it will help its action to add sugar to the water in which it is soaked. This is the recipe used for bread in the Kansas Agricultural College: For one loaf of bread use 1½ cups liquid, ¼ cup of yeast, 1 teaspoonful salt, 1 tablespoonful sugar, flour. Sterilize the liquid, let cool, then add yeast, sugar, and salt; add 2 cups of flour and beat thoroughly. Let it rise then work in enough flour to make a good dough. Knead well; let it rise again twice its bulk. No flour should be used in shaping the loaves, but all the flour should be used when kneaded.

TESTED RECIPES FOR MAKING BREAD.

HOMEMADE BREAD.—Two medium-sized potatoes, boiled and put through a sieve, one tablespoonful of salt, one teaspoonful of sugar, a lump of lard the size of an egg, two quarts of water and a teacupful of hop yeast.

GINGERBREAD.—Two cupfuls of molasses, one cupful of butter, two eggs, one cupful of brown sugar, one cupful of warm water and two teaspoonfuls of soda.

One and one-half cupfuls of molasses, one half of a cupful of lard, one half of a cupful of water, two eggs, one teaspoonful of soda, one half of a cupful of sugar, stiffen with flour.

One cupful of sugar, one cupful of molasses, one cupful of butter, one egg, one teaspoonful of cinnamon, one teaspoonful of ginger; stir all together. Dissolve two teaspoonfuls of soda in one cupful of boiling water, stir this in and add three cupfuls of sifted flour; bake in a hot oven.

SOFT GINGERBREAD NO. 1.—One half of a cupful of sugar, one cupful of molasses, one half of a cupful of butter, one teaspoonful each of cinnamon, cloves and ginger, two teaspoonfuls of soda dissolved in one cupful of boiling water, two and one half cupfuls of flour; add two well-beaten eggs the last thing before baking.

NO. 2.—One egg, one cupful of butter, one half of a cupful of sugar, one cupful of baking molasses, one cupful of boiling water, one teaspoonful of soda, one half of a teaspoonful of ginger; use flour enough to make a stiff batter.

TEA BISCUITS.—Two cupfuls of flour, two large teaspoonfuls of baking powder, one tablespoonful of lard, one fourth of a teaspoonful of salt. Mix flour, baking powder and salt together, then rub in lard; add milk enough for soft dough. Roll one inch thick and bake in hot oven.

HOT CROSS BUNS.—Here is a recipe for the genuine English Good Friday hot-cross buns: Dissolve in a generous half-pint of warm milk a quarter of a cupful of butter. Add this to a quart of sifted flour, half a cupful of sugar, half a teaspoonful of salt, half a grated nutmeg, half of a yeast cake; dissolve in a little water, and two eggs, the whites and yolks beaten separately. Mix into a soft dough, place it where it will not become chilled and let it rise over night. Take pieces of the dough

The American Boy

MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World

**"GOOD ALL THE WAY THROUGH"**

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year).....	1.00
Kansas Farmer, 1 year.....	1.00

Total.....	\$2.00
Both 1 year for.....	\$1.50
Address,	

KANSAS FARMER CO.,
Topeka, Kansas.**The Kansas State**

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS.

AGENTS WANTED Sell \$1 bottle Sarsaparilla for 50c; best seller; 200 per cent profit. Write today for terms. F. E. Greene, 115 Lake St., Chicago.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
415 Kansas Avenue, Topeka, Kansas.

the size of an egg and, with flour on your hands, mould them into round cakes an inch in thickness; put into a baking pan with little space between, then cover, and place where they will keep warm. When swollen to double their size, cut a cross in the center of each with a sharp knife, and bake for half hour in a moderate oven. When baked, rub with a syrup made of sugar and water.—Mrs. A. J. Bonn, Sterling.

The Young Folks

What Have We Done To-Day?
We shall do so much in the years to come,
But what have we done to-day?
We shall give our gold in princely sum,
But what did we give to-day?
We shall lift the heart and dry the tear,
We shall plant a hope in the place of fear,
We shall speak the words of love and cheer,
But what did we speak to-day?

We shall be so kind in the after awhile,
But what have we been to-day?
We shall bring to each lonely life a smile,

But what have we brought to-day?
We shall give to truth a grander birth,
And to steadfast faith a deeper worth,
We shall feed the hungering souls of earth,

But whom have we fed to-day?

We shall reap such joys in the by-and-by,
But what have we sown to-day?
We shall build us mansions in the sky,
But what have we built to-day?

'Tis sweet in idle dreams to bask,
But here and now do we our task?
Yes, this is the thing our souls must ask,
"What have we done to-day?"

—NIXON Waterman, in Christian Intelligencer.

Grandma's Story—a Talk About Dogs.

FLORENCE SHAW KELLOGG.

"Here children, here's something for you," said Mr. Gray, just returned from town, as he held a covered basket towards them. Susie opened it while the others crowded around her with eager interest.

"Oh, a puppy! a puppy!" screamed little Rose, as she danced about in glee. Tommy and Susie, though less noisy, were no less pleased, and all united in thanking their father for giving them "just what they wanted most," a beautiful Scotch Collie puppy whose soft eyes were already bright with intelligence.

"Oh, let's go quick and show him to grandma and have her help us name him," said Susie, and away they scampered. Grandma did not fail in showing her interest and pleasure and was quite willing to help in choosing a name for the new pet. She had just finished reading them Alfred Oliphant's romantic and beautiful story of "Bob, Son of Battle," and it was soon decided that the puppy should bear the name of that dear, faithful dog; and when at the first call of "Bob! Bob!" the puppy wagged his tail and looked up, Susie declared "He knows his name already," and after that there could be no doubt of the little fellow's great intelligence.

The talk naturally turned on dogs, and, almost before she knew how it happened, grandma was seated in her favorite chair with Rose in her lap, telling a story; and although she did not begin with "once on a time," the children knew it was all true, for grandma told none but true stories; and if the wise old lady did not "point a moral," they were learning many a good lesson from what she told them. In years to come, when life shall have grown earnest to them, the memory of the hours spent with her in the "chamber whose name was Peace," would be among the most blessed of their lives. But to our story.

"The first dog I dearly loved," began grandma, "was a black-and-white shepherd that we named Jack. My father bought him of Mr. Black, our nearest neighbor; but I, without knowing of this, supposed Mr. Black gave him to me, for he said when I was there playing with the puppies if I would carry one home I might have it. Jack was my choice; and, though I was only a tiny girl then, I well remember hugging the fat, squirming puppy home in my little apron. He was so fat and heavy that though it was only a short distance between the two houses, I had to stop by the roadside and rest before I got him home. He grew very fast and was a great pet among us children, but my father did not allow our petting and play to interfere with his training, and he became in time a very wise and valuable dog. He seemed to understand whatever was said to him quite as well as we did; and he sometimes put us to shame by his quick and willing obedience. When he grew old enough, it

was a part of his duty to drive the cows back and forth from the pasture to the milking-yard morning and night each day. Sometimes one cow would be missing. Then father would tell Jack of it just as he would tell a child, and the intelligent dog would go back to the pasture and hunt until she was found, when he would return driving her before him with an unmistakable air of pride, and he was as pleased as any boy over the praise given him. He seemed in every way one of the family, a dear playmate for us children, and a valuable helper to father. We all loved him dearly. I have told you how after he was an old dog, he learned to carry notes back and forth between our home and the new home to which my eldest sister had gone as a bride; all along the seven miles between the two homes—thickly settled miles they were, too—different ones, just to test his intelligence and fidelity, would try to take the notes from his neck, but all in vain. Come what might, he would only give them to the ones to whom he was told to carry them. Dear faithful old Jack! Though he lived to be so old that he lost all his playfulness and did little but lie around and sleep the last months of his life, we were very loath to let him go, and our tears fell fast when we knew he slept in death.

"It would be hard to find a more intelligent race of dogs than the shepherd, but a little, mongrel, yellow-brown dog your grandfather had when we were married—and for some time before—showed a marked degree of intelligence and no dog ever loved a master or was more faithful to one than was he."

"What was his name, grandma?" asked Rose, and "Was he little or big?" added Tommy.

"His name was Billie," answered grandma. "He was neither little nor big, but just a fat, roly-poly kind of a dog that your Aunt Martha said was the color of a 'burnt molasses cookie.' But he was smart and did many interesting things. He would own allegiance to no one but his master, and neither would he obey any one else, unless he chose to do so; but your grandfather's every command was law to him and we had to admire him for that, though his utter refusal to obey any one else was very trying at times."

"Was it Billie that knew the letter that came from his master, grandma?" asked Tommy.

"Yes, dear, that was Billie. And, went on grandma, "it was Billie that always slept on your grandfather's old coat or some other of his cast-off garments when he was away in Virginia, as he was all of one winter. It was always touching to see how he mourned his master's absence. His only comfort seemed to be to find some of his old clothes and make a bed of them. No one could fool him or make him take any others. I suppose with his keener sense of smell, he could detect some scent that he knew belonged only to his master that we could not perceive."

"Burroughs, you know, grandma," said Susie, "says 'a dog is almost a human product; he has been the companion of man so long, and has been so loved by him, that he has come to partake in a measure at least, of his master's nature.' Maybe there was some tie between grandfather and Billie that no one else knew of."

"May be so," returned grandma. "I am like Burroughs who in a recent letter to me said, 'I can believe almost anything of dogs. If they do not reason, they do something wonderfully like it.' I think we all have to come to this conclusion when we stop to think of all the wonderful things we know of dogs."

"Ernest Thompson Seton, in his fine stories of 'Bingo' and 'Willie' gives them many of man's attributes," said Tommy. "And," he added, "when you are reading his stories, you can hardly help agreeing with him, though I know Burrough's conclusions regarding reason in animals, particularly wild animals, are quite different from his."

"When doctors disagree who shall decide?" quoted grandma. "The difference between Seton and Burroughs is the difference between the young man's enthusiasm and an old man's conservatism; but Burrough's frank admission of the change that has come in his thinking, and his fear that, earlier in his life, he may have made too much of every bit of intelligence of bird, or four-footed animal that came under his observation, as he says 'the nature lover is always tempted to do, awakens our admiration and gives us confidence in him such as we can not feel for every one.' But I want to tell you something funny about Billie. His master's trip to Virginia, of which I have spoken, was for the purpose of getting a wife, and four months later, he took me home with him as proud and happy



Simpson - Eddystone Silver Greys

An almost limitless variety of artistic patterns—enough for every taste and fancy.

Desirable for dresses at any time of year.

Printed in absolutely fast color on fabrics of enduring texture.

Ask your dealer for Simpson-Eddystone Silver Greys.

Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



Lowell Ingrain Carpet

WHY YOU SHOULD BUY IT

Because: It has been recognized for seventy-five years as the best INGRAIN manufactured—**ALL WOOL.**

Because: The goods are wound on a hollow stick which constitutes a trade-mark and guarantees that you are getting a **LOWELL INGRAIN.**

Because: Styles and colorings are up to date, in plain shades and figured patterns; closely resembling high-grade carpeting.

Because: **LOWELL INGRAINS** are so woven that they can be used on both sides: a feature decidedly advantageous. No one doubts the wisdom of covering a room entirely in a rural home, making it warmer and easier taken care of.

Ask your local dealer for a **LOWELL INGRAIN** when looking for a new carpet. Look for the hollow stick and be satisfied with none other than a **LOWELL INGRAIN.**

Manufactured by **BIGELOW CARPET CO., New York**

**LOW
ONE-WAY RATES
VIA
UNION PACIFIC
FROM
TOPEKA
EVERY DAY**

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle. to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points. to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

To the Stockholders of the Farmers' Co-operative Shipping Association...

NOTICE

The Annual Meeting of the stockholders of The Farmers Cooperative Shipping Association will be held in Topeka, Kans., at the National Hotel, on Wednesday, April fourth, at 4:00 o'clock p.m. for the election of a Board of Directors and the transaction of such other business as may legally come before the stockholders' meeting. F. ENGELHARD, President. H. R. SIGNOR, Secretary.

More Money Made as Local Agent
**FOR FARMERS FIVE
YEAR ACCOUNT-BOOKS**

Also Five Year Dblures. Address

Chas. H. Allen Co., Rochester, N.Y.

It is a fearful condition to get into to be dependent upon others for our pleasures.—Billings.

The Little Ones

The Bedtime Storybook.

There's something very, very queer
About a storybook,
No matter what's the time of year,
Nor where you chance to look,

No matter when it is begun,
How many pages read,
The very best of all the fun
Comes just the time for bed.

When mother whispers in your ear:
"Tis almost eight—just look!
Now finish up your chapter, dear,
And put away your book."

The minutes almost seem to race
When it is growing late;
The very most exciting place
Is just at half after eight.

—Anna Burnham Bryant.

Ants, Uncles, and Cousins.

MRS. A. D. GRAY.

"Mother, oh mother!" called Ruth's voice, as she tried to tiptoe high enough to peep in at the window. "Are you there? Well, Helen and I are out here on the steps, and our ants are acting so crazy and funny. There's a lot more of them, too; do you suppose they are visitors?"

"No, for ants don't have visitors. If one comes, they drive him away or kill him."

"Oh, my! how unpolite!" said Ruth. "Tell us some more, mother, about the farmer ants—you promised."

"In five minutes," I said, "and you little girls watch very closely, and see if you can tell what is going on at your ant-hill."

A few moments later, when I drew my chair to the window, and took up my work, two very eager, interested little faces bent over the ant-hill.

"Look, look Ruth!" cried Helen. "They are bringing in tiny bundles; what do you suppose they've found?"

"Why it's other little live things—looks like worms," said Ruth. "Tis worms, for sure. Do tell us what they are trying to do, mother."

"Very well, this is a good place to begin," I said. "In every ant-hill, there are drones, queen ants, and workers. The queen ant does not rule the others, as the queen bee does. Her chief work is to lay the eggs. There are also builders, servants, nurses, and soldiers. Out of the queen ant's eggs come very lively, hungry baby-ants. They do not look like ants, however, but like little white worms. But I think the funniest part of all is, that this little white worm has to be fed, kept warm and dry, taken for walks into the sun and air and cared for, very much as we care for a real baby."

"The nurses are very kind to the baby-ants. They carry them out into the sunshine, and back to the hill again. They lick them all over to keep them clean and white, almost as the mother cat does the little kittens. They feed them, too, four or five times each day. After the worm has grown, it spins itself a fine, thin web and wraps all up in it. In a short time, it comes out a full-grown ant, with legs and wings."

"Then the hill becomes so full of brothers and sisters and cousins, that some of the new ants swarm, and fly away to start a new hill. The ones you were watching awhile ago are the nurses who have been taking the baby-ants out for an airing."

"The farmer ant lives in Texas and Florida and other very warm States. This ant raises its own grain for food; it is called ant-rice. These ants have very large hills—as large as a room sometimes. They cut down all grass or other grain, except this one kind. When the seeds of this ant-rice fall, all the workers hasten out and gather them up, one seed at a time, and carry them into the storeroom."

When all of the ant-rice has fallen they cut down the old stems, so that the land will be all ready for another crop. Don't you think that is very strange and wonderful?

"There's a very tiny brown ant that makes her nest of little balls of mud, which she rolls up, and then places as if they were bricks. This is called the mason ant."

"Then there are carpenter ants, who do much harm; they cut their way into trees and beams, and often make them fall."

"The strangest kind, I think, are the parasol ants. They live only in very hot countries—mostly in South America, where the sun is hot. These are very large and they cut for themselves bits of leaf, as large as a dime. They carry these in their jaws by a tiny piece left for a stem. They look very funny indeed, marching along two by two, each carrying his parasol. They line their homes with these bits of leaf to

Every Niece and Nephew of Uncle Sam

should be deeply interested in what he has said about soda crackers, because they are the one food with which all of them are familiar.

Uncle Sam has given out figures showing that soda crackers are richer in nutriment and body-building elements, properly proportioned, than any food made from flour.

This is saying much for common soda crackers, and much more for **Uneeda Biscuit**, because they are soda crackers of the best quality. They are baked better—more scientifically. They are packed better—more cleanly. The damp, dust and odor proof package retains all the goodness and nutriment of the wheat, all the freshness of the best baking, all the purity of the cleanest bakeries.

Your Uncle Sam has shown what food he thinks best for his people. His people have shown that they think **Uneeda Biscuit** the best of that food, nearly 400,000,000 packages having already been consumed.

Uneeda Biscuit

NATIONAL BISCUIT COMPANY

5¢

keep the dirt from falling in; at least that is what their purpose seems to be.

"You see that though people are very wise, there are some things they do not fully understand, and ants are one of them.

"I am sure you little girls will learn some things by watching your ant-hill, and if you do, you must be sure to tell me, too."

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Give and Get Good Club, Berryton, Shawnee County (1902).

Women's Literary Club, Osborne, Osborne County (1902).

Women's Club, Logan, Phillips County (1902).

Domestic Science Club, Osage, Osage County (1888).

Ladies' Crescent Club, Tully, Rawlins County, (1902).

Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).

Chaitso Club, Highland Park, Shawnee County (1902).

Cultus Club, Phillipsburg, Phillips County (1902).

Literateur Club, Ford, Ford County (1903).

Sabean Club, Mission Center, Shawnee County Route 2 (1899).

Star Valley Women's Club, Iola, Allen County (1902).

West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).

Fortnight Club, Grant Township, Reno County, (1903).

Progressive Society, Rosalia, Butler County (1903).

Pleasant Hour Club, Wakarusa Township, Douglas County (1899).

The Lady Farmer's Institute, Marysville, Marshall County (1902).

Women's Country Club, Anthony, Harper County (1905).

Taka Embroidery Club, Madison, Greenwood County (1902).

Prentiss Reading Club, Cawker City, Mitchell County (1903).

Cosmos Club, Russel, Kans.

The Sunflower Club, Perry, Jefferson County (1905).

Chaldean Club, Sterling, Rice County (1904).

Jewell Reading Club, Osage County.

The Mutual Helpers, Madison, Kans. (1906).

All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

A New Club.

I am happy to add to the club roll the "Mutual Helpers", of Madison, Kansas. The report above indicates that they are all their names implies—and more. The motto, if practiced, will

cause their helpfulness to reach farther than themselves, and their influence will be felt beyond their immediate surroundings.

ART PROGRAM.

Jules Breton.

I. Breton the artist.

II. "The Song of the Lark."

III. The French peasant.

IV. "Planting of Calvary."

I. The program of Jules Breton three weeks ago treated of his life up to the time he began his career as an artist. The paper under this topic should tell of his life and work, beginning with the terrible days of the revolution. He was so impressed with the misery of that time that he painted then his only sad picture—his first Salon picture, "Want and Despair." It was a great disappointment to him and he learned that sad pictures were not for him to paint.

II. Give a description of this happy peasant girl and her surroundings as she looks to you. Can you not hear the notes of the lark in your imagination? Is not the gladness and joy of the singing lark in her heart as she begins her daily toil? The sun just showing behind the trees tells the time of day. Breton loved the sunrise and sunset, and enjoyed watching the gleam of gold on the edges of the clothing, the sickles and the grain. Can you find it in the pictures?

III. The peasant was the subject of so many of Breton's pictures that a paper about the peasant life in France would help one to understand and appreciate his pictures more, and enlighten one very much also.

IV. One of his happiest pictures is the "Planting of Calvary." These calvaries were little chapels or crosses on top of a hill and an important ceremony attended the planting of them. It was this that prompted him to paint this picture. The little girl who was his playmate and sweetheart and afterwards consented to be his wife, posed as one of the young girls. She carries the crown of thorns.

The Mutual Helpers.

We organized February 14, 1906. You see, we are yet in our infancy, but most of our members have had experience in club work.

We are known as the "Mutual Helpers" and have taken kindness as our

watchword. We have adopted the Sunshiners' motto, "Have you had a kindness shown? Pass it on." Our club hymn is "Pass It On," our flower is the snowdrop, and our colors are white and green.

The object of our club is to promote sociability, encourage the art of fancy work and do all the good that our hands find to do.

We meet semi-monthly at the homes of the various members as their names come on a list alphabetically arranged.

We have divided the year into quarters and have taken a subject for each meeting during a quarter. This list is to be revised from time to time. Following is the list as it now stands: (1) Seasonable Recipes. (2) Notable events of the last quarter. (3) Club news. (4) Response by quotations. (5) Short story. (6) Miscellaneous.

Our officers consist of an honored helper, assistant helper, recording helper, and art instructor. After the work for the day has been completed, light refreshments are served and we have our social hour.

Our club is composed entirely of country women and I assure you these meetings are a source of pleasure to all of us. We go home feeling younger and happier and take up the burdens of life with new energy and courage.

A MEMBER.

THE INTERNATIONAL SUNDAY SCHOOL LESSON.

(Copyright, 1906, by Davis W. Clark.)

First Quarter. Lesson 12.

Proverbs 23:29-35. March 25, 1906.

A Temperance Lesson.

Israel's poet king and prodigies of wisdom sets himself to the task of painting the drunkard's portrait. It is a faithful likeness, and horrid because faithful. The royal artist persists in his undertaking, though his canvas grows lurid and frightful under each successive stroke of the pencil. His picture has proved a veritable danger signal, flashing its warning color upon successive generations for three thousand years. Its red light has proved a powerful deterrent to multitudes. Nowhere in literature is the woe, the sorrow, the folly, the fate of the drunkard so powerfully depicted. . . . That such a picture could be painted thirty centuries ago, sufficiently proves the antiquity of the vice. Drunkenness is no modern sin or mere accident of our civilization. It is

as old as Noah and older. Intoxicating liquors undoubtedly inflamed the race before the flood and led on to that nameless depravity which had to be drowned out in that awful judgment. And each succeeding generation has suffered the crushing weight of this dreadful woe; each has been burned, bitten and poisoned by this vice; from each has burst the sorrowful and despairing interjections, "O!" "Alas!"

Old as it is, Solomon's picture is the very similitude of the drunkard of to-day. Three thousand years have not sufficed to change the causes or effects of intemperance. Study the successive strokes of this masterful delination. . . . Those who tarry at wine, by the increase of the powerful and subtle appetite, are compelled to seek stronger potations (mixed wine). The gradation from light wine to red wine, and the highly alcoholized wine, with its eyes or beads, is inevitable. Then follows the facial signs of incipiency (redness of eyes); next quarrelsome ness, causeless wounds, and the inflaming of sexual passion. Finally incipient dementia, which makes the drunkard oblivious to personal danger and to indignities visited upon him by hooting mob or officer of law—a dementia in which, however, the appetite persistently asserts itself, the worm dieth not, the fire is not quenched. All is forgotten; all is lost; but among the debris of mind, heart and manhood, the conqueror stalks. "And careth naught for the awful ruin he hath wrought."

This is no pleasing fancy sketch of genius, nor happy aesthetical study; but it deserves the close, respectful attention of every one who loves himself and his neighbor. No Christian can push this picture aside unless his Bible permits him to say, "I am not my brother's keeper." No truly philanthropic spirit, Christian or not, can turn with indifferent coolness from this inspired canvas. It pictures the all-embracing "woe," making its piteous appeal to every one who professes to love his species. And if neither Christianity nor philanthropy is sufficient, from sheer self-interest the citizen must sooner or later give attention to this mirror which Solomon holds up before our time. Individuals in their collective or governmental capacity, must take stand against a traffic which produces deteriorated manhood, insanity, pauperism, crime, and death.

How We Should Dairy.

(Continued from page 314.)

and the result is that we have practically two fresh cows per year. Then, again, we have the cow dry during the months of July and August when the weather is excessively hot and flies are the most troublesome and when farm work is most urgent. By winter dairying we get the best prices for our product and we have lucrative work for our farm help during the winter when that help is cheapest.

It is easier to produce a good calf during the fall and winter than during the summer months. We can not afford in Kansas to overlook the value of a good calf. The skim-milk calf can be produced much cheaper than the calf which has been allowed to suckle the cow all summer. We hear farmers everywhere remark that there is nothing in keeping a cow a year for a calf. The time has come when we must produce a cheaper calf than we have heretofore. There is no reason why the skim-milk calf should not be as thrifty and weigh as much at one year old, as the calf raised the old and more expensive way. We must not overlook the production of a good calf and the proper utilization of the skim-milk in the feeding of both calves and pigs. Skim-milk for feeding young animals has no substitute. We can not get along without milk for young animals. We do not place a sufficiently high value on skim-milk. It is worth, as estimated by farmers, from 20 to 50 cents per hundred. Therefore, we must dispose of our skim-milk to the best advantage if we are to realize the fullest returns from our dairy operations.

There is no business of which we know, which will pay us as well for intelligent work as will the dairy. It gives to every man of brain capacity an opportunity to reap a golden harvest for every hour of thought and study which he gives the business. The most successful dairyman is the most intelligent dairyman. There is nothing about the dairy business which the man of ordinary intelligence can not master. It is a matter which the farmer can determine only through his own efforts and his own labors, if he makes money from his dairy. Every farmer can make the dairy pay if he will and it can be conducted as a most important adjunct to the farm operations. The

beauty of the dairy business is that a man can raise just as much corn and just as much wheat on his farm with the dairy as without, and when corn and wheat fail, he has a monthly cash income from his cows. This is really a great deal to the Kansas farmer.

A Premium for Good Cream.

By I. D. Graham, Secretary of the Kansas State Dairy Association.

"We recommend the system of buying cream on grade, believing that the purchase of cream on its merits by which a higher price is paid for cream of good quality as compared with cream of poor quality, is absolutely essential to the life and future success of the dairy industry in Kansas."—Resolution adopted by the Kansas State Dairy Association at its annual meeting at Abilene, Kans., March 3, 1906.

The dairy industry in Kansas has grown remarkably in the last ten years, and yet the industry in this State is only in its infancy. The farmers of Kansas have only begun to realize the advantages to be derived from the sale of the dairy products of a small herd of cows. The farmers have not yet begun to utilize the roughage and feeds produced on their farms, which can be converted into cash through the dairy cow. The climate and natural conditions in this State are unusually favorable to the production of dairy products. The winters are mild and short compared with Minnesota, Wisconsin, and other States which lead us in dairy production. Our soil and climate produce the best and cheapest milk feeds on earth. We, therefore, consider that there is a very great future for the dairy industry in this country.

In the future development and growth of the business, however, there is one thing which must not be lost sight of, and which must be considered if the future of the dairy industry is to be as permanent as it should be. That feature is the quality of the dairy product. It is a fact that Kansas butter does not enjoy as good a reputation in the markets of the world to-day, as it did five years ago when creamery operations in this State were on the whole-milk basis. The hand separator has succeeded the whole-milk plan and the result is poorer quality of the butter produced—not because the cream from hand separators should be any poorer than that from whole milk, but because of the fact that the patron using the hand separator, has been led to believe that his cream could be delivered once per week or once in ten days, and that it would make good butter. The creameries have been so anxious for a large volume of product, that little or no attention has been paid to the quality of cream received from its patrons. The creameries in the past have paid the farmer as much money for butter-fat delivered once per week or once every ten days, as they have for cream delivered two or three times per week. This action on the part of the creameries has therefore placed a premium on infrequent delivery, and on the conduct of the dairy business in a haphazard way. To the fair-minded patron this will appeal as wrong.

Recognizing the fact that unless a better quality of butter can be produced from the cream delivered to the receiving stations in this State, there will be a decreasing demand for butter from the West and that butter prices will be lower and consequently lower butter-fat prices paid to the farmer, we are commanding the State Dairy Association for the endorsement of a plan by which cream is bought and paid for on its merits.

There are creameries in this country now buying their cream on a grading plan and that plan is based on the frequency of delivery. In Minnesota, a State which has carried off the highest honors ever since the organization of the National Buttermakers' Convention some ten or twelve years ago, hand separator cream is delivered daily and will not be accepted if delivered less frequently. By this means the standard of cream has been held to the highest possible limit, and the very best butter produced in the United States comes from that State. It is a notable fact that even in Kansas from stations where cream is delivered most frequently, that cream is the best quality. Therefore, we see that frequency of delivery is an important essential to the delivery of good cream and the manufacture of good butter. We understand that some creameries are now offering a premium for butter-fat delivered twice per week during the present season of the year, which tests more than 30 per cent. This premium

price is four cents in advance of the price paid for second grade cream which, according to the grading system now in vogue, is delivered less frequently than twice per week during the present season, and tests under 30 per cent. We are told that the improvement in quality of butter so far, has been very noticeable indeed; so much so that a high premium for first grade butter-fat can easily be maintained. The grading system, as proposed, places a premium upon industry and careful methods in the dairy. It pays the careful dairy farmer a premium for his effort in producing a good cream, and this grading system will eventually create, wherever it is used, a class of dairymen who will produce only a first-class product and who, being paid well for their labor, will increase the volume of their product; and thus the dairy interests in this country will be placed upon a more substantial foundation with greater prospects for future success, than by any other means yet proposed.

The writer was in New York not long ago and made a visit to the butter commission houses in that city. We found those houses had their coolers piled full of second-grade butter, and that such butter was begging for a market at a price ranging from six to eight cents below the prices asked for first-quality butter. The first-quality butter was disposed of as soon as it appeared on the market, while the second grade could not be sold.

Every pound of second-grade cream and butter costs the farmer as much to produce as a pound of first grade. The expense has been identically the same and the difference in price received for second-grade cream as compared with first-grade cream, is an actual loss to the farmer. The Kansas farmer and the Kansas dairy industry can not afford to produce second-grade cream. A cream-grading system therefore, should be recommended by every farmer, and we understand this is meeting with general approval. We recognize in it the only system which will build up the business in this State; and we admire the grit shown by the various companies in venturing to establish their grading system. The patrons who favor this system should do everything they can to assist in maintaining it. The dairy industry in Kansas ranks next to our great wheat and corn crops and is much more certain than either. We can not afford to sacrifice our dairy industry by making a poor quality of butter which will not sell at the highest prices on our markets.

The Breeding and Handling of Dairy Cows.

Lecture by Prof. Oscar Erf, Chief Dairy Department, Kansas Agricultural College, at the National Dairy Farmers' Convention on Thursday, February 22, at Chicago.

The profits of a dairy depend largely upon the good qualities of the cows and the way they are kept. Breeding is an important factor and often determines the profit or loss in the business. According to the statistics of the U. S. Department of Agriculture, the average

Number of cow	Milk lbs.	Av. test per cent	Butter-fat lbs.	Cost of feed dollars	Butter- fat 15¢ per 100 pounds	Value Skim-milk Total	Receipts less produc- ing cost of butter-fat feed, per pound	
							SECOND LOT.	THIRD LOT.
1.	9,116	4.21	383.7	32.80	60.88	12.29	73.17	40.37 .085
2.	7,015	4.43	310.8	30.61	49.26	9.46	58.72	28.11 .098
3.	8,054	4.13	332.8	35.59	51.92	10.85	62.77	27.18 .106
4.	6,504	4.59	289.5	29.26	45.90	8.77	54.67	25.41 .101
5.	6,509	4.27	277.9	29.20	43.89	8.70	52.59	23.39 .105
Av.	7,439	4.28	318.9	31.49	50.37	10.01	60.38	28.89 .098
6.	5,742	3.48	199.8	29.55	31.02	7.75	38.77	9.22 .147
7.	4,772	2.92	187.0	27.25	29.88	6.44	35.52	8.27 .145
8.	3,475	.14	178.6	25.24	28.16	4.08	32.84	7.60 .141
9.	3,918	4.14	161.9	27.27	25.41	6.27	30.18	3.41 .168
10.	4,200	3.96	166.3	27.69	25.38	5.59	30.97	3.28 .166
Av.	4,420	4.04	178.7	27.40	27.81	5.94	33.75	6.35 .153
11.	3,583	3.79	135.7	26.75	21.39	4.83	26.22	.43 .197
12.	2,903	4.13	119.9	22.89	18.11	3.91	22.02	.87 .190
13.	3,730	4.23	157.8	31.22	24.34	6.02	29.36	1.89 .198
14.	2,141	4.74	101.5	24.43	15.30	2.88	18.18	6.25 .240
15.	3,089	4.06	125.4	26.32	19.43	4.16	23.59	2.73 .208
Av.	3,089	4.19	125.5	26.32	19.71	4.16	23.87	2.45 .204

cow produces approximately 131 pounds of butter-fat per year. If we base our calculations on the average market price of feed that a cow consumes, and the care she requires, we find that it would take at least 175 pounds of butter fat to pay for the feed of a cow for one year. According to these statistics, there are a great many cows in the United States that do not produce enough butter-fat to pay for their feed and care. The problem confronting us

You Will Prosper in the Great Southwest

In Oklahoma, Indian Territory and Texas are vast areas of unimproved land—land not now yielding the crops of which it is capable. The same conditions apply to the towns. Few lines of business are adequately represented. There are openings of all sorts—for mills and factories, for small stores, for banks, newspapers and lumber yards. You have only to get on the ground to prove this. To enable you to do so the Missouri, Kansas & Texas Ry offers

Rates Cheaper Than Ever February 20th and March 6th and 20th

On above dates most lines will sell both one-way and round-trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

If you're in any way interested in the Southwest, I'd like to send you my paper "The Coming Country." Address

W. S. ST. GEORGE
General Passenger Agent
580 Wainwright Building, St. Louis, Mo.
Tickets on sale everywhere, via



"SOUTHWEST."

is how to secure animals that will pay for their feed. The only practicable method that we have to suggest to dairymen, is to determine the value of each individual animal by weighing the milk and testing the same for three consecutive days each month throughout the period of lactation. Then estimate the cost of feed that a cow has consumed, and the difference between the value of the food consumed and the value of the milk produced, determines the profit or loss. It is safe in this case to take feed as the basis of cost, against butter-fat as the basis of production, for in most cases such expenses as labor, interest on investment, deterioration by age, and general expenses, may be offset by the value of skim-milk, buttermilk, manure, and the value of the calf.

As yet, we have no absolute proof that a cow, tested for a year and making a high record, will continue to do so throughout the prime of her life. After a cow has once proven to be profitable, the future of that cow, if she has not passed the prime of her life, depends entirely upon the care and handling that she receives. Many a good cow has been ruined at the hands of an unsuccessful dairyman, who has either neglected her by not milking her properly, or by not feeding her properly and otherwise abusing her.

The individuality of an animal can be best brought out by a table which represents an experiment conducted by the Kansas State Agricultural College:

A Year's Record of a Herd.

FIRST LOT.

Products Cost of feed, per pound

Skim-milk Butter-fat

100 pounds 15¢ per pound

Total Value

Receipts less producing cost of butter-fat feed, per pound

Second lot Butter-fat

15¢ per pound

Third lot Butter-fat

15¢ per pound

Loss

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

11. 12. 13. 14. 15.

16. 17. 18. 19. 20.

21. 22. 23. 24. 25.

26. 27. 28. 29. 30.

31. 32. 33. 34. 35.

36. 37. 38. 39. 40.

41. 42. 43. 44. 45.

46. 47. 48. 49. 50.

51. 52. 53. 54. 55.

56. 57. 58. 59. 60.

This table represents a scheme in which fifteen cows are divided into three lots of five cows each. The first lot produced butter-fat for approximately 10 cents per pound, the next lot 15 cents, and the third lot 20 cents. These were common cows, such as are kept by the average farmer, and you will note that here is the reason why so many dairy-farmers who have a large number of cows may not make any profits because they fail to pay

attention to the individuality of the animal.

Assuming now that the market price of butter-fat is 15 cents per pound, which is very low, the center group would neither make a profit nor a loss. The first lot would make a profit of 5 cents per pound of butter-fat produced, and the last lot would make a loss of 5 cents per pound of butter-fat produced. Hence, the loss made by the last five, assuming that conditions were equal, would balance the gain of the first five. Therefore this whole lot of cows would neither make a profit nor a loss. From this it is very readily seen that if the last two lots of cows were discarded, the first five cows would make a profit of \$126 per year. However, the average price paid in Kansas for butter-fat for the last year was 22 cents per pound; hence all of these cows would have made a profit.

According to this scheme, a man that would test and keep a record of his cows would be paid for his work to the extent of \$126 per year for the five cows. The question may arise, will these cows continue their performance from year to year, and may it not be that some of the other cows will do better in the succeeding years? It is true that there is some danger on basing conclusions on one year's record, for some cows produce more one year than they do another. These records are of greater value when they are kept continually. However, two years' record should determine quite definitely the capacity of a cow. There is a possibility then of such an occurrence in the second class of cows, but there is little risk to run for any cow of the last lot to deviate from her one year's record, and double her capacity so that it will come up to the standard of the first lot. Since the second lot pays for the labor and feed involved, it might be well to keep a number of these animals and try them for the second year. If at the end of the second year they have failed to come up to the requirements of producing butter-fat for less than the average market price, they should be sold.

When once a herd has been established, and, with possibly a few exceptions, the cows are profitable and have good milking qualities, there comes that ever-puzzling question of how to perpetuate the qualities of good ones that have been selected, and whether or not by breeding, these qualities can be reproduced in the offspring from a good cow if the sire is of equally good milking strain.

Environment, which includes the handling and care of a cow, has much to do in gradually increasing the capacity for milk-production. A marked increase in production can not be brought about in this way in one individual, but by keeping cows and bulls under the most favorable conditions, the capacity of a herd can ultimately be increased by each generation. Environment works hand in hand with the laws of breeding. In fact, dairy cattle have been brought to the present stage of productivity by care and selection. The effect of environment on animal-breeding can be well illustrated in the following manner: The Holstein-Friesian breed originated in the lowlands of Holland and Northern Germany, where the forage and grass grew rank and tall and not very rich in nutrients. These animals adapted themselves to this particular environment by developing rather a large frame and body in order to handle the feed. On the other hand, the Jerseys originated in the isle of Jersey, which on account of its hilly character and poor soil, produced a grass which was short but quite nutritious, developing a class of animals small and particularly adapted to that region and for that kind of feed. While it is true that environment influences milk-production to a certain extent, it is however a fact that the laws of breeding have a greater influence on individuals. But in order to increase the production, the handling and care of the dairy cow must not be lost sight of.

The laws of breeding are complicated and interlaced. Furthermore, there are a great many influences that assert themselves in practical operations so that it becomes impossible to single out a definite law that will always bring the same results.

Taking out the element of environment, there are two principal conditions in breeding which stand out prominently and which bring forth apparently the best results. (1) It is the old law in breeding that "like breeds like," which means that the mating of two characters which are bred for many generations, will become fixed in the offspring. By this law it is not possible to increase the capacity for milk-production of an individual more

than that of her ancestry. For instance, we assume that a strain has been bred for many generations, which has the characteristic of producing 30 pounds of milk per day, on an average. If two animals with this particular character were bred together, we can expect nothing more than that the female offspring will have the capacity of producing 30 pounds of milk per day, assuming that in this statement all other functions correlate in approximately the same per cent as in all future generations. A characteristic, such as the milking quality of a cow, can be fixed most readily by continuous in-and-in breeding. This is the method that nature uses in establishing all kinds of types of animals suited for their particular condition and environment. For instance, the squirrel is the same animal that it was a thousand years ago. The quail is the same size that it was centuries ago, and with these there is in-and-in breeding year after year. We can go to the fields and the forest and find plenty of wild animals that maintain their species with the closest type, generation after generation and year after year.

The idea generally prevails, that by in-and-in breeding weaknesses occur and that the capacity for milk-production will be decreased. Such influences can only come about when two animals of weak constitution are bred together. This weak constitution has been acquired by conditions to which the animal has been subjected. Hence, to avoid this possibility, start with a strong class of individuals and always breed from sires of strong, dominant character, to females of equally vigorous character.

(2) The second condition is, that if two animals of dissimilar characters are bred together, the offspring will assume the qualities principally of the individual that has a dominant character; but the fixed characteristics of either animal are more or less disturbed and in succeeding generations almost any gradation and blending of the cross can be expected. As a matter of fact, when two animals of good milking strain are bred together, we generally get an offspring that is quite superior in milk-production to either of the ancestors. However, this can not be absolutely relied upon, but is the best way to increase the capacity for milk-production. To perpetuate the character in succeeding generations, this cross must be bred to a male who has a dominant character for milk-production inherited from his ancestors. If no such strain of animals is available, it is wise to breed this offspring back to its sire in order to fix this character. For instance, a bull and a cow are mated, both from different strains. The dam and the sire's dam have the character to produce 20 pounds of milk per day well established, but these strains for many generations back are not related to each other. The offspring from this cross may only have a capacity of 15 pounds. However, it is more likely to have the capacity to produce 30 pounds. To fix this character in succeeding generations, it would be wise to breed this offspring back to its sire, which has but 20 pounds capacity, while there is a possibility of slightly reducing the capacity of the offspring; yet it fixes the character and makes it more permanent for future generations. But if you desire to run the risk of a still greater increase in milk-production, it would be well to breed this cow with a capacity of 30 pounds of milk per day to a sire of another strain, which has an average capacity of 30 pounds per day. The closer a strain is related, the more permanent and the more reliable will be the fixing of that character for all future generations at 30 pounds capacity.

The above example relates to strains of one particular breed, which has come under my observation, but in some localities it is made a practice to cross-breed a dairy breed with some beef breed, as for instance, the Jersey with the Shorthorn, in order to increase the size of the offspring without affecting the milk-production. While this is being practiced the results will become quite indefinite and unsatisfactory. Some scientists say that Mendel's law comes into play here. While I have no absolute data to prove this statement, it may be true, and I have some confidence in it from some incidents that I have noticed. Mendel's law is based on the law of chance, and in brief, is that on second and later generations of a cross-breed; every possible combination of parent characters occurs, and each combination appears in nearly a definite proportion of the individuals. For illustration, a Jersey with good milking qualities is bred to a Shorthorn with a beef character. Both animals are pure-bred. Let J rep-

resent Jersey characteristics; M milking qualities; S, Shorthorn characteristics; and B the beef qualities. A character that asserts itself prominently is known as the dominant character, and is represented by a capital. A hidden or latent character is known as recessive, and is represented by a small letter. JM and SB are bred together and the result will be JsBm,

JM } Js Bm
SB }

meaning a cross with Jersey character dominant, Shorthorn recessive, beef qualities dominant, and milking qualities recessive. If two cross-bred animals are mated, we would have a mixture of four kinds of characters in the male to four kinds of characters in the female. On the average, one-fourth of each kind will combine and we have a combination of characters like this:

Male.	Female.
JM	JM
JB	JB
SM	SM
SB	SB

1. JM X JM = JM.
2. JB X JM = JBm.
3. SM X JM = JsM.
4. SB X JM = JsBm.
5. JM X JB = JBM.
6. JB X JB = JB.
7. SM X JB = JsBm.
8. SB X JB = JsB.
9. JM X Sm = JsM.
10. JB X sm = JsBm.
11. SM X SM = SM.
12. SB X Sm = Sm.
13. JM X SB = JsBm.
14. JB X SB = JSB.
15. Sm X SB = Sm.
16. SB X SB = SB.

Here it will be noticed that two and five give the same results. Similarly, 3 and 9, 8 and 14, 12 and 15, 4 and 7, 10 and 13. We may therefore represent the cross-breed and its progeny as follows:

One part Jersey dominant with beef quality dominant.

Two parts Jersey dominant with beef qualities dominant and milk recessive.

One part Jersey dominant with the milking qualities dominant.

Four parts Jersey dominant, Shorthorn recessive, with the beef qualities dominant and milk recessive.

Two parts Jersey dominant, Shorthorn recessive, and milk dominant.

One part Shorthorn with beef qualities dominant.

One part Shorthorn dominant, with beef qualities dominant, milking qualities recessive.

One part Shorthorn with milking qualities dominant.

Of the nine types, four of them, 1, 3, 7, and 8 are supposed to be pure and will reproduce themselves. It will be noticed that each of these pure types constitutes one-sixteenth of the progeny of the cross-bred. Four other types have one latent character which constitutes two-sixteenths of the whole. The last four, with two latent characters, constitute four-sixteenths. The law continues to operate in the above manner.

While this is still an experiment with dairy cattle, it becomes impracticable for the individual dairyman, since it requires too much expense and time to get results. The solution of the whole problem of breeding dairy animals from a practical standpoint, can be summarized in a few brief principles. Get a bull of some recognized breed with a long line of high milk-producing ancestry, and see as many of them as possible that are within your reach. Find out if the dam and grandam had good dairy qualities. Although it appears entirely a female function, it is transmitted largely through the sire. Be sure and get a sire that is from a better milk-producing strain than your own cows, and notice that he has the power of transmitting his own characteristics to the offspring. The best calf to raise, then, is the one that shows most largely the qualities of the sire. Observe closely in connection with this, and it will be found that it is generally the calves of cows that show the greatest improvement from feed and better care that are best to keep.

With these conditions it is always advisable to raise as many calves as possible, with the expectation of discarding many of them when 2 or 3 years old, or even before that time if we see any tendency to revert to some original ancestry poor in milk-production. In-and-in breed as much as possible in order to reduce to a minimum the tendency to revert, by breeding the sires to the heifers, or to another which closely resembles them, and you will have a basis for a good strain of cows. However, during this time we must not lose sight of the fact that better feed and care has a great deal to do with the improvement of the herd. This is particularly the case in the development of a heifer. Feed them good, rich, nitrogenous feed during their growing period. Give them plenty of

exercise and fresh air and a good, clean, sanitary place to sleep. After the heifers have produced their second calf, if they have not come up to the standard of a good cow, discard them and continue to breed from those that produce milk and butter-fat at a profit. To carry out these principles requires considerable time and money, but it will bring results.

I should be glad to see the time come, and that soon, when dairymen will unite their efforts and establish test associations, and in connection a breeding association, which will control the breeding of cows and the selecting of bulls from records and performances. This can be very easily established in communities where there are a great number of individuals of one breed, this association to employ a competent man to test the cows and keep a record of their breeding, and this man also to be in charge of the male animals purchased or bred by the association, from a good milking strain and possessing dominant characteristics which will be perpetuated on his offspring. There is undoubtedly no better and safer method to increase the milk-production of individual cows and to perpetuate the strain.

THE EMPIRE WAY.

On the evening of Saturday, February 24, there started from Chicago a special train consisting of six sleepers, a dining-car, an observation- and a baggage-car. The destination of this train was Bloomfield, N. J., the home of the Empire cream-separator. On board the train were the general agents and salesmen of the Empire Separator Company to the number of about eighty, and twenty-nine representatives of the principal agricultural papers of the United States. The route was laid over the Grand Trunk line from Chicago to Buffalo, which included a stop of six hours at Niagara Falls. From Buffalo to Bloomfield, N. J., the route was over the Delaware and Lackawanna, which road furnished the train.

The expense of the trip, including the chartering of the train of sleeping-cars, the furnishing of the meals on the dining-car, a banquet at the Prospect House at Niagara Falls, a trip down the Gorge to Queenstown and Louiston from Niagara Falls, and every other expense incident to such a trip and the royal entertainment of every man on board, was borne by the Empire Cream Separator Company.



ERNEST E. BELL,
Secretary and Sales Manager of the
Empire Cream Separator Co.,
Bloomfield, N. J.

The purpose of this trip was to give the selling agents of the Company an insight into the various processes of manufacture of the Empire cream-separator and to give the newspaper representatives such knowledge as would prove an inspiration in their comments in regard to this machine.

Never in all history, so far as the writer can learn, has there been an industrial organization of any sort which possessed at once the keep foresight, the cash to spend, and the nerve to spend it in carrying more than 100 men half way across the continent, furnishing them with every comfort of life for eight days, and sending them home brim full of enthusiasm, with no other object in view than that of giving these men accurate knowledge at first hand.

Four days were spent at the factory. These were devoted entirely to educational work. Each forenoon was spent in studying the methods and materials of the factory, and each afternoon was

devoted to institute work in which ways and means were discussed. Lectures were given by heads of departments of the factory, and questions and experiences by the fieldmen present.

Each division of the factory was numbered, and a small catalogue was prepared to guide the visitor and give him accurate information as to the operations performed in the sections visited. With this catalogue and under the guidance of some expert connected with the factory, each one of the party was enabled to see every operation through which each of the component parts of the Empire cream-separator was put before the final assembly in the perfect machine. The motto of the Empire Separator Company is "Not how cheap, but how good," and

is sales manager of the Empire Separator Company and who acted as chairman, would tolerate no disparaging remarks in regard to rival machines. His men were told distinctly and positively that their motto should be "Push, and not Knock." It is true that he tried to show them that they had a good machine. He showed them that a poor machine was a poor investment; that a tolerably good machine was like a tolerably good egg, of doubtful value.

One entire meeting was devoted to the discussion of dairy methods with the object of securing better cream and, consequently, better butter. It was shown that millions of pounds of inferior butter, known as "dairy seconds," were now in cold storage with

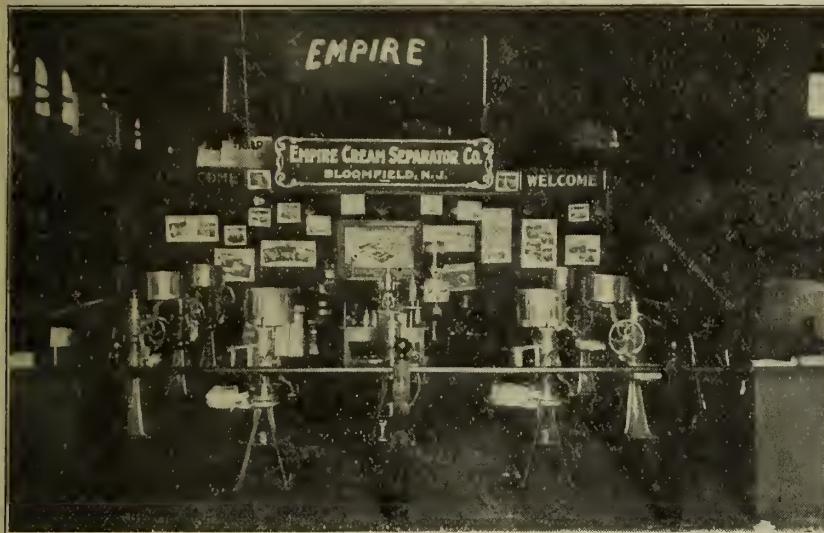


Exhibit of the Empire Separator Company, Bloomfield, N. J., at the National Dairy Show, Chicago, Ill.

perhaps the most interesting phase of our visit to the factory was shown in the quality of the materials used. The writer was impressed with this quality from his own personal examination, and later on he had the privilege of listening to a lecture given to the assembled agents by the expert who has charge of the supplying of all the materials that are used in the machine. Some of these materials are imported from Sweden because the quality necessary can not be made in this country. Nothing but the best material obtainable is used in any part of the machine. The bowl of the Empire separator is made from solid drawn steel tubing by a special process which is known and practiced by only one manufacturing concern in the United States. The highest quality of steel is used and the bowl is drawn thicker than necessary so that the outer and inner surface of the tubing may be pared away by the lathe and thus leave the heart, which is of the highest quality, for the bowl. Some bowls used in other separators are made of electrically-welded sheets of metal, which, in the high speed necessary to a separator bowl, are liable to break at the weld with disastrous results to the machine. It is impossible to break the Empire bowl. Greater care and better materials could not be used in the highest quality of watches than are used in the Empire separator. It is a marvel of mechanical perfection.

A large portion of the work is done by automatic machinery whose product is absolutely and mathematically accurate. Each part manufactured for these machines is interchangeable with all like parts. A new anti-friction device has just been added which practically makes the Empire separator frictionless. The writer stood by one of these hand separators and timed the revolutions of the bowl after the power had been removed. It was speeded up to the proper speed and the handle dropped, after which the bowl revolved for thirty minutes so free is it from friction. A machine that will revolve for half an hour after the power has ceased to be applied, is about as nearly perfect as human ingenuity and skill could make it.

In their competition with other separators in the field, the Empire Company believes that its best method is to make a better machine than the others do. Whether this has been accomplished or not, the fact remains that their machine is so nearly perfect that none but an expert could criticize it, and it would take a remarkable expert to do that.

In the meetings which were held daily at the factory, discussions were had of methods and every phase of the business that comes into the life of a salesman. It was noticeable that in these meetings Ernest E. Bell, who

no buyers. It was shown that this condition of affairs is to some extent the result of the work of irresponsible and unscrupulous salesmen who tell the farmers that it is not necessary to wash their separators, or at least that it is not necessary to wash them often than once a week; who tell them that it is not necessary to deliver their cream more than once a week in winter and twice a week in the summer; in fact, who tell them almost anything in order to effect the sale of a separator. It was brought out very strongly at this meeting that it is a part of the business of every salesman who handles a good separator, to teach the purchaser, so far as he can, good dairy methods and practice so the best results may be obtained from the use of the machine.

One of the most important matters discussed before these meetings was the subject of graded cream. The common practice all over the country since the development of the hand separator and the centralized creamery plant within the last few years, has been to receive any kind of cream at any time, and pay the same price for cream that is not only bad but absolutely rotten, that is paid for cream of good quality. This is not only an injustice to the creamery buying the cream, but to the separator man who sells the machine and to the farmer himself. No farmer should feel that he is entitled to a good price for inferior cream. The farmer who supplies good cream is wronged when no distinction is made between his product and that of the careless farmer who delivers spoiled cream. This condition of affairs has existed so long and its burdens have been so heavy to bear by both the farmers and the creamery companies, that a concerted effort has been made by the latter in some States to adopt the graded cream system by which a higher price is paid for cream delivered in good condition, than for that in poor condition. The justice of this will appeal to every one and to none more than the man who sells cream-separators. As it appears to the writer, a crisis in the creamery business is approaching, if indeed it is not already here. When a very large percentage of the product of the creameries must be graded as "creamery seconds" and go into cold storage where it remains without a market, injury, if not disaster, is bound to result to the creameries producing this butter, and through them to the farmers who supplied the bad cream.

Not only is the visitor impressed by the superior quality of the materials and workmanship employed in this great factory, which are not excelled in any factory, but he can not fail to be impressed with the personality of the men at the head of this great enterprise. From President Hennings G.



If you knew for sure that one cream separator is a great deal better—better for you—than all other separators;

If you knew for sure that some one of them would make more dollars for you than any of the others, you'd be pretty sure to insist upon having that one, wouldn't you?

Well, I know that the

Improved Frictionless **EMPIRE**

is the cream separator that will make the least work for you, save you the most labor, give you the least trouble and the greatest satisfaction and make the most dollars for you.

And I want the chance of proving it to you.

You are interested, for when you buy a separator you are just as anxious to get the best as the manufacturers are to sell an EMPIRE.

How am I going to prove it?

It is not an easy thing to do on paper, because every manufacturer and every agent is continually claiming that he has the only cream separator worthy the slightest consideration.

They can use just as strong arguments—on paper, as I can. Between us you are apt to get confused. But you need not depend upon what any of us say.

You can find out for yourself. If you will only examine an EMPIRE you can see how simple in construction it is; you can feel how much more easily it turns; you see how much more quickly and more easily it can be washed, and you can be pretty sure from even a casual examination that it will last longer, give less trouble and require fewer repairs than any other, simply because it is so much simpler in construction.

If you ask any one who has ever used an EMPIRE you can hear all about its good points, for every EMPIRE user is enthusiastic in its praise. That's why so many other people buy the EMPIRE.

I know you will never regret taking a little time to find out the good features of the EMPIRE. I promise you that you will feel it well spent. I ask you to send a postal card to the EMPIRE CREAM SEPARATOR COMPANY telling how many cows you milk and what you do with the milk and they will send some mighty interesting books about dairying and cream separators. Won't you let them do it? Send your name today. Just address

EMPIRE CREAM SEPARATOR CO., BLOOMFIELD, N. J.

311 TEMPLE BLOCK, KANSAS CITY, MO.

A Dollar Game Free

For postage. Send eight two-cent stamps and tell how many cows you keep and what you do with your milk and we will send you the "Game of EMPIRE Success," the most amusing, attractive and fascinating game ever invented. Old and young can play. Bushels of fun for all the family. Handsomely lithographed in colors, mounted on heavy binders' board 12x16 inches.

Get the Empire Books.

Ask for the one you want.—

1. Full catalog and price list.
2. "The EMPIRE Dairy Maid."
3. The Switching of Hiram, (story.)
4. "Figger it Out for Yourself."
5. "A Gold Mine for Butter Makers."
6. Dairy Results—Dollars.
7. Money and the Way to Make It.

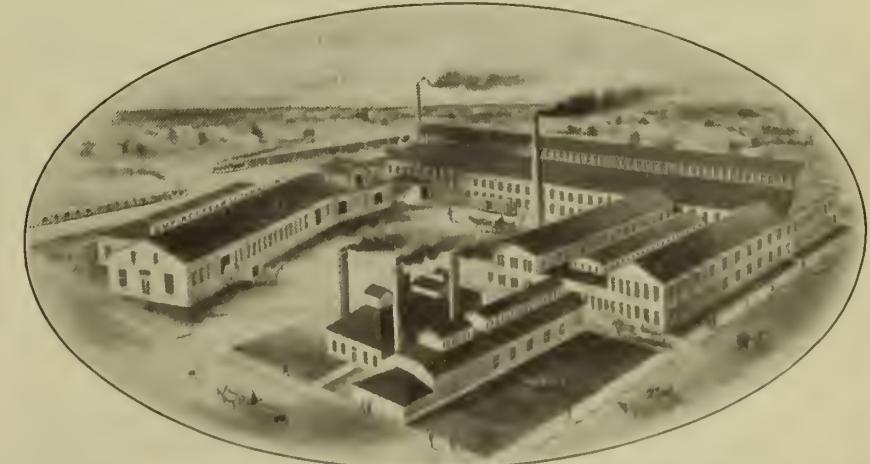
Taube down to the humblest chore boy, the same spirit of accuracy, energy, and honesty, is shown. Perhaps no one connected with the factory impressed the visitors with his personality more than did Ernest E. Bell, secretary and sales manager, who is the real man behind the gun. We take pleasure in presenting a portrait of Mr. Bell, who has made a wonderful record in building up the great Empire Separator Company from its small beginnings of a few years ago. His personality is so strong that it is felt everywhere in and about the factory, and throughout the field force. He is not only a hard worker himself, but he inspires others to do their utmost. Every one of the eighty salesmen who visited the factory on this occasion, went home filled to his capacity with enthusiasm instilled by Mr. Bell and the quality of the machine which he offers to the public. His instructions to these men

A Way to Get Rid of Rats.

EDITOR KANSAS FARMER—I know from experience that plaster of Paris will kill rats and also cause them to leave the premises; but you must use good judgment and management. First feed them cornmeal two or three nights by putting it under boxes with a small opening just large enough to let in the rats, so that they will think they are stealing the food. Then mix about one-half meal and one-half plaster of Paris and put in the same places. You may not kill many but more will be sick, and if one dose will not do the work, give them another. They will soon leave as they are wise little rodents and take for granted that your premises are not healthy for them.

Wabaunsee County. E. THOMPSON.

Fruitful trees are profitable trees to plant. Leaves are not the fruits you plant for when you plant apple- or



General View of the Empire Cream Separator Factory at Bloomfield, N. J.

were brief but full of force. They are simply to "tell the truth about the Empire."

In thinking over this remarkable trip and pondering as to its results, one can not help a feeling of amazement that this company should be willing to incur an expenditure of \$20,000 simply for the purpose of instructing its men by object lessons, and of instilling into them a degree of enthusiasm which must prove practically relentless in their future campaign as salesmen.

This is the Empire way.

Truth doesn't alter or grow old; 2 and 2 made four when Adam was a boy, and it amounts to the same to-day.—Billings.

No, sir! Most any old tree will bear leaves. But you want something besides leaves you want fruit and plenty of it. If you want to be sure that the trees you plant will be fruitful trees, buy them direct from the Gage County Nurseries, Beatrice, Neb. They offer you a "square deal"—that means fruitful trees, true to name, sure to grow, and they guarantee the trees will reach you fresh and bright, and all right. There is some pleasure in planting the kind of trees they send you trees that you know will bear fruit in plenty for your labors. Write for their catalogue to-day, their variety makes it easy to order just what you need.

When we read represents us when we go to seed.

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK FRUIT BOOK shows in NATURAL COLORS and accurately describes 216 varieties of fruit. Send for our terms of distribution. Wm. Stark, salesmen, 100, Louisiana, La.

TREES THAT ARE CHEAP in price and of the best quality, free from disease and true to name. Complete assortment, blue bill good for 25¢ and catalogue free. Freight paid on \$10 orders. FAIRBURY NURSERIES, Box L, Fairbury, Neb.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES Small Fruits and Evergreens. Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEEDS That will Grow **PLANTS** That will Bloom **SEEDS** Annual Flowers, 10¢-50¢. Vegetable Special Catalogue. SEEDS, 10¢. Annual Flowers, 10¢-50¢. Vegetables, 10¢. PLANTS, 6¢-Roses, 25¢. Geraniums, 25¢. 6 Begonias, 25¢. 4 Pelargoniums, 25¢. My catalog prices will surprise you. Catalog and packet Royal Giant Peas free. A. C. Anderson, Columbus, Nebraska.

SEED CORN Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamington and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr. Manchester, Illinois

HARDY EVERGREENS We grow them by the million. To prove they are healthy and vigorous we offer 12 species and varieties of evergreen property owners. Mail us \$1.00, which entitles us to a postal will bring them. Catalog with 42 colored plates of Hardy Fruits etc. Write today. The Gardner Nursery Company, Box 740, Osage, Ia.

Iowa Produces the Best **SEED CORN**

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 54, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO. St. Louis, Mo.

GOOD SEEDS CHEAP BEST EVER GROWN

A wonderful big catalog **FREE**. Full of engravings of every variety, with prices lower than other dealers. The book is worth a dollar to any one who plants seeds. Big Lot of Extra Packages Free to Every Customer. Send yours and neighbors address. R. H. Shumway, Rockford, Illinois.

SAVE ON TREES 40%

Buy direct from us at Wholesale Prices and save the agent's commission. Our trees and bush fruits are all selected from the choicest stock and especially adapted to the soils and climate of Kansas, Missouri and the Southwest. Our direct railroad communication with all points of this section enables us to deliver all stock promptly and in the best of condition. We offer liberal discounts and guarantee all stock true to name. Write now for wholesale price list. Wichita Nursery, Box B, Wichita, Kan.

GOLDEN YELLOW CALLA LILY, 6 Buds.
50 KINDS 10¢
Aster, Balsam, Cannna, Callipriss, Nasturtium, Morning Glory, Panay, Larkspur, Jobs Tears, Poppy, Golden Glow, Snapdragons, Cosmos, Pink, Zinnia, Verbenla, Monkey Plant, Sweet Rocket, Primrose, Ice Plant, Petunia, Castor Oil Beans, Portulaca, Candytuft, Sweet Peas.
5 CHAMPION BULBS.
The Summer Hyacinth, Golden Lily, Hellebore, Bird, Gladiolus, Giant Tuberosa, Baby Breath, Oxalis, all this beautiful collection of seeds and bulbs only 10¢, in silver or 5¢ c. stamps to pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10 cents. CHARLESTOWN NURSERY, - CHARLESTOWN, MASS.

Horticulture

Douglas County Horticultural Society.

The regular monthly meeting was held Saturday, February 17, at the court-house. The attendance and interest at these meetings is on the increase. J. R. Elevens, the north-side market gardener, being on the sick list, his subject was taken up as a general discussion. A. J. Martin being absent, his subject, "Family hotbed and cold frames," was postponed to the March meeting. A letter from A. N. Deming, who is visiting in California, proved of much interest to those present—it commented upon California landscapes and fruit conditions from a Kansas standpoint.

Mrs. B. F. Smith's paper treated in a unique way "The Toad." The toad should rank next to the bird as the great bug-catcher and worm-destroyer, with appetite always keen; not beautiful nor a cunning pet, but harmless and always helpful. It lives to a great age and is of much value to the gardeners and fruit men. She has had for several years a pet toad which makes its home under the bush by which she throws her table-scrap. It has grown to be of very great size. A never-to-be-forgotten incident in her childhood was the liberation of a half-swallowed toad with which a large snake, with its tail wrapped around a bush, was having an argument. The child and her stick soon closed the career of his wiggleship, and the toad was spared.

At the last meeting, James Means, manager of the cannery, said that there was money in raising asparagus for the cannery, and the society paid close attention to William Miller's talk on "Commercial Asparagus." Mr. Miller has raised this delicacy in the garden since 1858, and commercially since 1881. He has an acreage of 3½ acres and said that it would be impossible to plant eight or ten acres for the cannery-factory unless it was done upon a specific, long-term contract, as it took six years to get the beds in full bearing and cost an outlay of at least \$200 per acre, a prohibitory outlay on uncertainties. A very low price could be made because everything, big and little, would be taken by the cannery and there would be no expense of sorting, bunching, and weighing. Owing to the floods having washed out beds on the bottoms, it had been a profitable crop for a year or two past, but new acreage was now being planted. A bed is good for twenty to twenty-five years.

He said the secret of success in commercial growing was to plant the whole tract at one time, not cut any the first two seasons, and after that every third day, cut every scrap that showed above the ground. This kept down the two great pests; the beetle which lays its eggs upon the young stalk just breaking through the ground; also a black fly that stings the stalk near the ground, causing hundreds of pounds to be rejected. Every stalk is kept cut until June first to tenth, then the growth is allowed to take the bed and the weeds are kept down with cattle from time to time. There are two kinds of plants, male and female. The male plant sends up but few stalks, but these are very large and fine. The female plant sends up a great clump of small stalks, and besides sheds seed; and for this reason nearly all of the female plants should be rejected in planting out a new bed. Asparagus should be set on a south slope on warm, sandy loam; plow ten inches deep and subsoil; rows should be four to five feet and plants 3½ feet apart in row. Plant as deep as eight inches. The bed should have fifty loads of manure to the acre each year. Disk and cross-disk in the spring. An acre will yield from 1,500 to 3,000 pounds after the sixth year, and will then have cost \$200 per acre to establish.

Forrest Savage, an old settler, spoke of watermelons on sod, supposedly the settlers' first crop. Coming here in 1855 he said the diet of the first comers consisted of quail, fish from the streams, and in the fall wild geese and ducks. In winter the main provision was buffalo meat. The fruits were wild plums and grapes, blackberries, paw-paws, hickory and walnuts. The first year from planted gardens single sweet potatoes were dug two feet long, and a single Irish potato would make a meal for a family. His favorite watermelon was the Washington, long, stripe, and spotted like a snake. The melons "on sod" were truly superb. Then this old gentleman, well along in his eightieth year, went into ecstacies

FARMER

describing the charms of the "Prairie Sod Girl," also a product of those times.

W. E. Barnes, of Vinland, the largest orchardist in the county, then spoke of his first planting of fruit-trees from Massachusetts in 1857. In 1860 he planted pears, apples and grapes. At that time he obtained the Missouri Pippin from Missouri and planted it. It blossomed in the second year and gave the first home-grown crop of apples in this county in 1863. This encouraged others to plant. In the fall of 1868 he planted an orchard of 4,000 trees, seven hundred of them being Missouri Pippin—these latter alone paid all the cost of the orchard. There were no codling moths previous to '69. They came with shipped-in fruit. His best crop was in 1883, which sold in bulk at \$2 per barrel. No fungus nor bitter-rot at that time. It came about 1887. Between 1883-85 his first planted apple-trees began to decline. Mr. Barnes believes in and practices spraying.

W. E. Koehring was drafted without notice to take up "The Kitchen Garden." This he did in a thorough and pleasing manner. He believed in taking lots of risk from frost in extra early planting. His subject was well worth reproducing at length.

G. W. M.

Rhubarb.

A. N. H. BEEMAN.

Rhubarb, or pie-plant, as it is commonly known, is one of the most healthful, one of the most easily grown, and one of the most valuable of garden vegetables. It is of such importance and real value that it ought to be more generally grown. A good thing, so easily gotten, so easily grown, ought not to be so infrequently found and used in our farm and even our city homes. There are a great many valuable and wholesome vegetables, but rhubarb stands without an equal in its class. It is one of the earliest vegetables of springtime. Its strong, vigorous leaf stalks, so crisp and brittle, push themselves from the cold ground into sunshine and air. The whole plant reflects of inborn strength, vigor, and freshness. Its uses are many and it can be prepared easily for table use. There is nothing like rhubarb pie or sauce in the early spring months. There are but few things with the same tartness or acidity, wholesomeness, and palatability, as has rhubarb.

A small bit of ground is large enough to grow enough plants—ten to twenty—for an ordinary family. Most city homes, and at least all farmers, have some small plot or corner of ground, perchance unoccupied or in weeds, which might well be planted to rhubarb. A good, moist, deep loam, thoroughly enriched with well-rotted barnyard manure, is an ideal soil for rhubarb. Plants may be grown from seed, but "roots" or "crowns" are usually used. Seed should be sown in early spring, say in April. The second season's growth usually furnishes some stalks large enough for use. An ounce of seed will sow from 100 to 125 feet of rows. In about eight weeks after sowing the plants should be thinned to about eight inches, or transplanted in temporary rows. The following spring they should be transplanted to their permanent places, setting them three or four feet apart in rows that are four feet apart. Cultivate throughout the season, and give the ground a covering of good barnyard manure in the fall. The leaves can be pulled until the first of June or July, depending upon your wants and needs, and upon market demands to a degree. But pulling should cease early enough so that the plants will be able to make a good growth before fall. Unless seed is desired, which is rarely the case, cut the flower stalks as they appear. The original plants will last for a number of years, but it is best to divide the crowns and make a new settling about every fifth year.

The full value and utility of rhubarb has not been fully realized until recent years, when it has been forced. But few of our common vegetables are so well adapted for forcing. Because of the marked ease of forcing, we can secure this vegetable in a more attractive and equally valuable form in midwinter or later than we can from outdoor planting. The forced product is of the highest quality. It can be forced in light or darkness. It is not exacting as regards a definite degree of temperature, which may vary from 45° to 70°. The lower temperatures are best, producing stalks more crisp and with less acid. Rhubarb can be forced in a cellar, in a box, even in the kitchen, or in well- or poorly-constructed forcing-houses. It is perhaps most

HEALTHY TREES Honest in quality. Grafted Apples, Budded Peaches, Concord Grapes, \$2 per 100; Black Locust and Bass Mulberry, \$1 per 1000. We pay freight. Complete catalog free. Galbraith Nurseries, Box 32, Fairbury, Neb.

READER IF YOU HAVE NO BERRY PATCH and desire one, my 1906 catalog may tell you how to start it. 50 varieties plants low priced. B. F. SMITH, Drawer C Lawrence, Kans.

WRAGG TREES WE PAY FREIGHT. END for our handsome catalog of Trees, Shrubs, Roses, Evergreens, Etc. We deal Direct. Our prices are lowest. M. J. WRAGG NURSERY COMPANY, 307 Good Block, DES MOINES, IOWA.

World's Premium Seed Corn, HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

SEED POTATOES RED RIVER GROWN

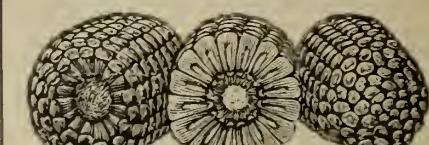
Best pure stock—large smooth seed potatoes of all leading and best varieties of both early and late sorts. Including Early Ohios, Early Rose, Early Six Weeks and other kinds, at 90¢ to \$1.00 per bushel. Quick shipments and low freight rates. Big, fine illustrated catalog of all farm, grass and garden seeds with full descriptions and prices sent FREE if you mention this paper. Write to-day.

RATEKINS SEED HOUSE, Shenandoah, Iowa

50 BULBS 25 Cents. Will grow in the house or out of doors. Hyacinths, Tulips, Gladioli, Crocus, Fuchsias, Oxalis, Tuberoses, Begonia, Jonquils, Daffodils, Chinese Lily, Dewey Lily, Gloriosa, Lilies of the Valley—all postpaid, 25c. in stamps or coin. As a premium with these Bulbs we will send FREE a big collection of flower seeds—over 200 kinds. HILLSIDE NURSERY, SOMERVILLE, MASS.

After 50 Years we still keep up the old habit of giving special directions, when asked, in addition to those for raising each variety of vegetable and flower contained in our catalogue—sent free. J. J. H. GREGORY & SON, Marblehead, Mass.

High-Grade Flower Seeds. 20 Packages FOR 10¢. KINDS. Bat. Button, 10 Poppy, 18 Portulaca, 20 Candytuft, 5 Aster, 10 Marigold, 18 Eschscholtzia, 6 Zinnia, 12 Sweet Peas, Sweet Alyssum, 8 Balsam, 12 Pinks, 10 Sweet William, 8 Larkspur, 6 Petunia, 10 Nasturtium, 10 Calochlora, 8 Sweet Mignonette. All of the above sent to any address, post-paid, for 10¢, silver or six two-cent stamps. As a premium to introduce our seeds into every household, we will also send a collection of fine beautiful bulbs FREE with Catalogue. Somerville Nursery, SOMERVILLE, MASS.



SEED CORN

There are many points to be considered in selecting seed corn; some of the most important are outlined in the above order, namely, well filled out at butt end with small to medium sized shank; the tip of each kernel exposed or covered over with fair sized grain; the kernels should be wedge shaped from cap to where it rounds off at point or germ end, and the rows should close together but still not so tight as to smother the germ and cause mold. The grain must be deep and set on a small cob which is of such texture that it will dry out easily and quickly. These points are all brought the nearest to perfection in the new

GOLDEN WEST It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue, illustrating and describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seeds. Mailed free if you mention this paper. IOWA SEED CO., DES MOINES, IA.

The World's Fair Prize Winning Corn
Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers' List, White and second on Boone Co., White. Sample and catalog tells how to raise Corn every year FREE. John D. Ziller, Hinckley, Kansas.
He RAISES CORN.



15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer, that will flower for the next 10 years with plenty of beautiful flowers.

1 Clump Mixed Phlox,	All Colors, 25c
1 Clump Hollyhocks	" 25c
1 Clump Mixed Sweet Williams	" 25c
1 Clump Mixed Baby Breath	" 25c
1 Clump Mixed Ragged Robin	" 25c
1 Clump Mixed Crysanthemum	" 25c
1 Clump Mixed Dianthus Pinks	" 25c
1 Clump Mixed Golden Glow	" 25c
1 Clump Mixed Poppy	" 25c
1 Clump Mixed Bleeding Heart	" 25c
1 Clump Mixed Coreopsis Harvest Moon	" 25c
1 Clump Mixed Hyacinthus	" 25c
1 Clump Mixed Dahlias	" 25c
1 Clump Mixed Hardy Asters	" 25c
1 Clump Mixed Hardy Iris	" 25c
This entire collection, worth \$6.00.	\$2.00

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, MALDEN, MASS.



20 HARDY PLANTS \$5.00

Shrubs and Running Vines

1 Syringa (Lilac)	1 Rhododendron
1 Japan Snowball	1 Azalia Mollie
1 Double Altbea	1 Weigela
1 Double Flower Almond	1 Rose of Sharon
1 Hardy Hydrangea, 4 ft.	RUNNING VINES.
1 Syringa Mock Orange	1 Japan Honeysuckle
1 Blue Purple Fringe	1 White Star Clematis
1 Womaria Beautiful	1 Dutchman Pipe
1 Lilac, white and purple	1 Ampelopsis
1 Deutzia	1 Boston Ivy
1 Bridal Veil	

20 Hardy Plants from 4 to 5 ft. tall. This entire collection, only \$5.00. Send your order early and we will send the fine collection, worth twenty-five dollars, enough plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.

NATIONAL PLANT CO., Somerville, Mass.



42 Plants \$2.50

10 Currant Bushes 10 Gooseberry Bushes

10 Raspberry Bushes 10 Blackberry Bushes

1 Concord Grape Vine 1 Niagara Grape Vine

Greatest Bargain yet, 42 plants, all grown, ready to bear fruit, for only \$2.50. Every one should have these lovely fruits growing in their garden. Now is your chance. Order early, and be sure of them.

BAY STATE PLANT CO., Boston, Mass.

The Best Fruit Paper

In The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year, but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Every one who has a few fruit trees or a garden, should read

THE FRUIT-GROWER
ST. JOSEPH, MISSOURI

Every issue is handsomely illustrated and from 32 to 64 pages a month are filled with interesting matter pertaining to fruit growing and gardening. The first four issues of 1906 will be the following subjects—January, The Horticultural Society; February, Spraying; March, Gardening; April, Small Fruits. Any one of these numbers will be worth a dollar to you. We publish the "Brother Jonathan Series" of fruit books. Send your name and address and we will tell you how to secure these books free.

TRADE MARK
BRO. JONATHAN

Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

(Continued on page 311)

commonly forced in low, double-spanned, roughly- and cheaply-constructed houses. An excavation two to three feet deep may be made and arched over with a roof of boards or logs, covered with hay, straw, or fodder, and the dirt of the excavation thrown over the entire roof. No particular facilities are necessary for ventilation. Unless in a severely cold winter, the house can be heated by use of ordinary heating stoves. In more expensive houses, and in case of extreme cold, a system of hot water or steam heating would undoubtedly be advisable.

Good, strong, two-, three-, or four-year-old plants are used in forcing. The plants to be used are dug in the fall, and with their adhering soil left in the field and covered with enough soil to prevent drying out. It is best to leave them there until they have been frozen through. About the first of January—earlier or later as the case may be—the roots still retaining their soil are brought into the forcing-house. They are set or packed close together on the moist dirt floor. Moist soil, preferably a rich one, is filled in about each plant, covering the crown slightly. After they are once thus packed in they may not need watering, but the roots and soil should not be allowed to become dry. Only strong, vigorous plants will produce the large, thick stalks, eighteen to twenty inches high. When properly grown, the forcing-house product is attractive, of delicate color, tender, and of excellent flavor. After the plants have produced this winter crop of leaves, they will have become exhausted and are of little or no value for any purpose in the future.

But two varieties are commonly grown—Linneus and Victoria. A new and supposedly better kind, introduced by Burbank, is called the New Crimson. The Victoria is a late variety of excellent quality, bearing large, thick leafstalks. Linneus is also a large, tender and desirable sort, but it is earlier than Victoria.

Winter Vegetables.

F. P. RUDE, BEFORE SHAWNEE COUNTY HORTICULTURAL SOCIETY.

To have all kinds of vegetables for next winter you must begin to plan for them now, and include such seeds in your seed-list as will be needed for spring and summer planting. The soil should be good and well fertilized and should have good cultivation in proper time.

CABBAGE.

The seed of late varieties should be sown the middle of May, and the plants set about June 20. A part of this may head too early to keep for winter, and it can be made into kraut or sold. Let the cabbage for winter use remain in the garden until there is danger of freezing, then pull it up with all of the leaves on and dig or plow a trench wide enough to set two or three heads side by side, heads down and roots up, and cover with six inches of dirt. Leave it this way until freezing weather begins, then add another covering of litter of some kind, or long manure, and you will have the cabbage where you can get at it all winter through, and it will be fresh and crisp.

CELERY.

The seed should be sown the first of April in a well-prepared seed-bed in the open ground. If the weather is dry, the bed should be sprinkled and kept moist until the seed germinates. Keep the plants free from weeds and well cultivated until they are large enough to set out in the row where you want them to grow. The first to the middle of July is the time to set celery for winter use. Rows should be four feet apart, and the celery set six inches apart in the row. Commence to cultivate immediately and keep cultivating. Celery can be grown without water, but the more water used the better the celery. As the celery gets well grown it should be handled, that is, the soil should be pulled up around each plant to make it grow more upright.

Storage.—Let your celery grow as long as you can in the fall, until the nights begin to get frosty, and then it is time to store it for winter and to bleach it. The best method is to dig a trench one foot deep, two or three feet wide, and as long as needed. Line the sides of the trench with boards, take up the celery when the leaves are dry with as much soil on the roots as possible, and pack as closely as possible in the trench, using fine, moist soil to pack the roots in, as though you were setting it out to grow again; and if the soil is dry, use water enough so

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices.

GARDEN CITY, KANSAS

ALFALFA SEED

Kansas Grown. Non-Irrigated. From grower to consumer. Write for prices.

MEADE, KANSAS

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to

KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

La France Fruit and Plant Farm

F. W. DIXON, Prop., Holton, Kans.

Strawberry Plants that Pay to Plant: Our new catalogue is now ready to mail. It is a common sense treatise on growing strawberries and other small fruit in the West. We have a very choice lot of plants this season that are grown on new fields and are first class in every respect. Besides strawberry plants we grow large quantities of other small fruit plants. All the well known varieties of raspberry and also best varieties of blackberry plants. Large quantities of asparagus, rhubarb, etc. Write for our common sense catalogue. It is free. Address, F. W. Dixon, Holton, Kans.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865.

Fort Scott, Kan.

Ratekin's Pride of Nishna Seed Corn

"Pride of Nishna" is a golden yellow, 16 to 24 rows; deep grains and small cob; matures in 95 to 100 days; of great vitality and strength to resist drouth and other unfavorable conditions, making from 80 to 100 bushels per acre. "Ratekin's Iowa Silver Mine," white, has made the greatest record for large yields of any white corn in the world—averaging 178 bushels per acre in seven states; full counterpart of "Pride of Nishna."

Our Seed all grown by us from absolutely pure stock, especially for seed purposes. All carefully selected, sorted, and butt and tip ends taken off and graded to uniform size. Seed shelled and graded or in the ear. Change your seed while you can get the best; grow bigger and better crops. Price, \$1.25, shelled, sacked, on board cars here; 10 bu. or more, \$1.25. Our big Illustrated Catalog of all Farm and Garden Seeds mailed FREE if you mention this paper. Write for it today.

Address, RATEKIN'S SEED HOUSE, Shenandoah, Iowa.



HARDY ROSE BUSHES

Live Out Doors, Summer and Winter.

10 ROSE BUSHES \$1.50

- 1 General Jaquemineot (Brilliant Red).
- 1 American Beauty (Red), Beautiful.
- 1 Magna Charta (Pink), Extra.
- 1 Mrs. John Lang (Soft Rose).
- 1 Ulrich Brunner (Cherry Red).
- 1 Pearl des Blanches (White).
- 1 More Rose (Beautiful Red).
- 1 Celine Forester (Yellow), Fine.
- 1 Sweet Briar (Sweet Scented).
- 1 Crimson Rambler (Large, Beautiful, Running Rose).

Ten of the choicest varieties, 3 and 4 years old Rose bushes, only \$1.50. The regular price for these bushes is seventy-five cents each. This is a great bargain. You will notice that this collection has very choice, beautiful shades. All green, packed in moss. True to name. Do not miss this grand offer.

ORDER QUICK, and get this fine Collection imported from Holland. These bushes are grafted. They will flower this year.

WAYSIDE NURSERY, Somerville, Mass.

POULTRY BREEDERS' DIRECTORY.

PARTRIDGE COCHINS—Toulouse Geese, purebred; farm raised. Eggs \$1 per 13 and 7. Mrs. O. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Langshan eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Bred by W. F. Cox, Clinton, Kansas. Eggs for sale at \$2 per 15.

CORNISH INDIAN GAMES—Raise chickens for meat and eggs; not for fat and feathers. For the best meat and eggs in the world, buy a sitting of eggs, \$1.50 and \$2 per sitting. L. Horst, 400 West 10th, Newton, Kans.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Whiners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

S. C. B. LEGHORNS—Beautiful fowls, fine markings, splendid layers. Eggs, \$1 per sitting; \$5 per hundred. Mrs. D. M. Evans, Edgerton, Kans.

BARRED PLYMOUTH ROCK EGGS—From large, beautiful, pure-bred chickens, only \$1 per 15; \$5 per 100. Mattie Shearer, Frankfort, Kans.

RIODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller, "Vineyard Farm," Mound City, Kans.

BARRED AND WHITE ROCK EGGS—\$2 per 15; \$5 per 45 from our best matings. Hawkins & Bradley stra, scoring 94 to 96. 17 years experience with poultry. Mr. and Mrs. Chris. Bearman, Ottawa, Ks.

FOR SALE OR TRADE—One good black jack, with white points, 1½ hands high, 7 years old, a good individual and a good breeder, or will exchange for good dairy or pure-bred beef cattle. Address John L. Stanley, Nyhart, Bates Co., Mo.

BARRIED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

FOR SALE—Light Brahma and White Wyandotte cockerels. I have a few high-scoring ones left, as it is getting late I will now offer them at a bargain, \$2 to \$5, scoring 92 to 94. Satisfaction guaranteed. Eggs, \$1 to \$2 for 15; Buff Cochon Bantam eggs, \$1 to \$2. Mrs. J. R. Kenworthy, Wichita, Kas.

BARRIED PLYMOUTH ROCKS—Either cockrel or pullet. Matting pens headed by 9½ to 9¾ point birds; females 9½ to 9¾. Eggs, \$2 per 15. Utility pen cocks, 9½ to 9¾; \$1 per 15, \$5 per 100. Silver Penelled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94½; females, 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners; 15 for \$2; from flock, 100 for \$5. W. C. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

CHICK-O for baby chicks; a complete, balanced ration. Ask your dealer or write, D. O. Coe, Topeka.

BARRED PLYMOUTH ROCKS—Bradley stra, prize winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75¢; 100 \$3.50. H. F. Brueggemann, Route 2, Herington, Kans.

PURE BRED White Wyandotte eggs for sale; \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORNS cockerels and pullets scored by Rhodes 92 to 94% points. Write for prices. A. F. Hutley, Maple Hill, Kansas.

FINE BLACK LANGSHANS started from \$3.00 eggs. Fifteen eggs for 50 cents. Minnie D. Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK EGGS—From direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

FOR SALE—Silver Laced Wyandottes, White Plymouth Rocks and Partridge Cochins. Fine stock, each raised on a separate ranch. Eggs, per sitting of C. 15. Letters promptly answered. Address W. C. Koenig, Nortonville, Kan., First Nat'l Bank Bldg.

BARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Gilbrith, White City, Kansas.

BUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmams, M. B. turkeys, and Toulouse geese. From prize-winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovette, Proprietor, Mullinville, Kansas.

R. C. RHODE ISLAND RED EGGS—Farm range, \$1.00 per 18; pen, \$2.00 per 18. I. W. Pulton, Medora, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans., 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandalia, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Roven duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred, Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Brue, Plate Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Breeding high score, large egg record cockerels. Duskin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeders of choice birds. Eggs \$1.50 per 15. Member American White, P. R. Club. J. E. Shinkle, Lakin Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

Marking the chickens has two advantages: one is in being able to know

The Poultry Yard

The Orpington Breed of Fowls.

The Orpington breed of fowls was produced by the late William Cook, of England. The Single-comb Buff Orpington is the most popular of the ten varieties. They were produced in 1894, after ten years of persevering work, by crossing the Golden Spangled Hamburg cock with a dark Dorking pullet. The progeny from this cross were mated to a Buff Cochin cock from a noted laying strain. Not only are the Orpingtons noted for their laying qualities, but they are excellent table birds and of handsome appearance. The weight of cocks is from eight to ten pounds. Hens weigh from six to eight pounds. The hens make good mothers; though large, they are active, not tramping on the young or breaking the eggs while sitting. They are fast growers, mating early, and when we are looking for a breed for profit on the farm, the Orpington fills the bill for layers and weighs heavily when we take it to market. Mrs. J. R. Cotton, Neosho County.

Poultry Pointers.

The severe cold weather of the past week has been very trying to young chicks just hatched and their owners should be careful to see that they are well protected from the weather. A stunted chicken never amounts to much, and it should be the object of the poultry-raiser to see that it grows right along without any severe setback. The earlier you can get chickens hatched the better—provided you see to it that they are properly protected when sudden storms and blizzards arrive.

Should the combs of some of your fine birds get frosted these cold mornings, the best remedy is to rub briskly with glycerine.

Nearly all poultry diseases are caused by either cold, dampness or want of cleanliness. Sometimes it comes from bad feeding. Neglect somewhere is the cause of all the disease. It is easier to guard against disease than to cure it. It is always unsatisfactory to treat sick birds, and the old adage, "an ounce of prevention is better than a pound of cure," applies most pertinently to poultry diseases.

While you are cleaning up don't forget the nest boxes. No portion of the hen-house fosters more vermin than the nest. Remove every particle of the material and burn it up, replacing with nice fresh straw or hay. If the nest is removable, take it out and saturate well with coal-oil.

If you should happen to break your incubator thermometer, you can get a new one by sending 75¢ to Thos. Owen, Station B, Topeka, Kansas.

Many a breeder of fine stock has ruined his herd by crossing and mixing, and the same is true of poultry. Select the breed that suits you and then stick to it. Don't experiment by crossing; let the other fellow do that. And if, after a great outlay of time and money, he evolves something that is better than you have, you can get it from him cheaper than it would cost you to produce the same thing.

Poultry Notes.

N. J. SHEPHERD, ELDON, MO.

Save the eggs from the best laying hens, but be careful to have such hens in company with a pure-bred cock; and if he is the son of a good laying hen, the pullets hatched, being sired by him, will be good layers as compared with breeding from all kinds of fowls.

If a hen needs food of a nitrogenous nature and she is fed that which is deficient in nitrogen, her hunger is appeased for a time, at least, and warmth provided for her body, with perhaps enough of the elements required to repair waste of tissue, but not enough to supply her with the extra materials for producing eggs. Hence the hens may in one sense be well-fed and yet not lay.

Perhaps the most attractive goose is the Embden. While not so large as the Toulouse, the difference in size is very little. The Embden, however, is entirely white and makes an attractive appearance in market, while the feathers bring a better price.

If the breeder wants to keep up the vigor of his stock, he should never make a practice of breeding from pullets. The best breeders are hens in their third year, mated to a cockerel or cock one year younger than the hens.

Marking the chickens has two advantages: one is in being able to know

POULTRY BREEDERS' DIRECTORY.

BARRED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreler, Argonia, Ks.

PURE single comb brown leghorn eggs; 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

BLACK LANGSHANS—Hens scoring 93 and upwards, headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kansas.

MY R. I. REDS won seven prizes on eight entries at Kansas City. Circular, H. C. Kellerman, 3516 Smart Ave., Kansas City, Mo.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

FOR SALE—Young M. B. turkey toms from high-scoring, prize-winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas, \$1 per 15. Virga Balley, Kinsley, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30. \$3.50. M. Bronze Turkey eggs, 11 for \$3.

MAMMOTH BRONZE GOBBLERS—Buy one to improve your flock. Young toms all sold. C. E. Durand plantation, Hutchinson, Kansas.

CHOICE B. P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

Eggs for SALE—S. C. W. I. leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1905 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Avenue, Topeka, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93½ to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

BARRED ROCKS EXCLUSIVELY—Left strain. Large, heavy-boned, fine, clear: Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards, John D. Ziller, Hiawatha, Kansas.

WHITE WYANDOTTE COCKERELS, (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Mervin, Kansas.

Mammotn Bronze Turkeys

FOR SALE—Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kansas.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver, Blue Mound, Kansas.

Eggs for Hatching

M. B. turkeys, \$1 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns

EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ-ING, KAN.

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choke stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 96, \$2 per 15; \$1 per 15 as they run. Incubator eggs for sale.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention KANSAS FARMER when writing.

POULTRY BREEDERS' DIRECTORY.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Good Calves and Poor Ones

You can't grow a big bodied, productive cow, or a large fat steer from a calf that won't eat. If you supply sufficient and proper ration, Dr. Hess Stock Food in tablespoonful doses, will do the rest. It gives hearty appetite, and perfect digestion, so that the calf takes on increased growth and is kept free from disease.

DR. HESS STOCK FOOD
A TONIC

makes your stock healthy and hungry—and what they eat Dr. Hess Stock Food compels them to digest and put to proper use. It is the prescription of Dr. Hess (M.D., D.V.S.), containing tonics for the digestion, iron for the blood, nitrates to expel poisonous materials from the system, laxatives to regulate the bowels. The ingredients of Dr. Hess Stock Food have the endorsement of the Veterinary Colleges and the Farm Papers. Recognized as a medicinal tonic and laxative by our own Government, and sold on a written guarantee at

5c. per lb. in 100 lb. } Except in Canada
sacks.
25 lb. pail \$1.60. } and Extreme
West and South.
A tablespoonful per day for the average hog.
Less than a penny a day for horse, cow or steer.
If your dealer cannot supply you, we will.

DR. HESS & CLARK,
Ashland, Ohio.
Also Manufacturers of Dr. Hess Poultry Pan-a-ee-a
and Instant Louse Killer.

Sick Headache

When your head aches, there is a storm in the nervous system, centering in the brain.

This irritation produces pain in the head, and the turbulent nerve current sent to the stomach causes nausea, vomiting.

This is sick headache, and is dangerous, as frequent and prolonged attacks weaken the brain, resulting in loss of memory, inflammation, epilepsy, fits, dizziness, etc.

Allay this stormy, irritated, aching condition by taking Dr. Miles' Anti-Pain Pills.

They stop the pain by soothing, strengthening and relieving the tension upon the nerves—not by paralyzing them, as do most headache remedies.

Dr. Miles' Anti-Pain Pills do not contain opium, morphine, chloral, cocaine or similar drugs.

"Sick headache is hereditary in my family. My father suffered a great deal, and for many years I have had spells that were so severe that I was unable to attend to my business affairs for a day or so at a time. During a very severe attack of headache, I took Dr. Miles' Anti-Pain Pills and they relieved me almost immediately. Since then I take them when I feel the spell coming on and it stops it at once."

JOHN J. McERLAIN,
Pres. S. B. Eng. Co., South Bend, Ind.

Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails he will return your money. 25 doses, 25 cents. Never sold in bulk.

Miles Medical Co., Elkhart, Ind.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address

THE KANSAS FARMER CO.,
Topeka, Kans.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

March 28, 1906—Shorthorns by Shawnee Breeders Association at Topeka State Fair Grounds, I. D. Graham, Secretary, Topeka, Kans.

April 3, 1906—Janes Stock Farm, Willard, Kans., trotting-bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Borthorns at Manhattan, Kans. F. M. Gilford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, Des Moines, Iowa, Manager.

Care of Young Pigs.

I give you my mode of care and treatment of young pigs; First, I wish to give the way I feed and care for them. I feed my sows on a bulky feed and keep the bowels in proper condition. I bed my farrowing pens about a foot deep with straw. I long ago got over the idea that a basket of cut straw is bed enough for a sow at farrowing. If the sow has not bed enough, she will get up every little while and paw and scrape at her bed, to get it up together, trying to make it soft so she can rest; but if she has plenty of bed, she will lie down and be quiet for many hours and will not kill as many pigs as a sow that has not enough straw to make her bed comfortable.

I feed my sows all the bran, corn, oats, and slop they want just before farrowing; I want the stomach full at this time. I put water in a trough where they can get it when they want it. About the second day I give them a feed of roots, as I generally have some beets for them. I feed them roots for a week, when I give them a little slop made of bran, corn, and oats, or something of that kind, and increase the feed as the pigs grow stronger. When they are three or four weeks old and pull on the sow, feed all she wants; as soon as the pigs need it I feed them in a low trough where the mother can not bother them. In this way I am quite successful. Of course, the bed should be kept in good condition.

I think scours is the most prevalent disease among young pigs, and for this I have no remedy. I have not been bothered with scours among my pigs for six or seven years. I used to feed many things for scours, and I was very successful in producing them, too. I fed nearly everything I saw recommended as being good for scours, and I think I was as successful in producing scours in pigs as any breeder I ever saw. My last experience with the disease was in 1887. I had a very fine litter of six pigs. I was feeding for the scours and the pigs had it very bad. At last I tried giving the pigs laudanum (they were perhaps two weeks old). I put it in water and gave them a little—I think less than one drop each; I gave five of them laudanum and they went crazy in a few minutes; they never sucked or laid down after that; they traveled for hours and died; I killed the last two to get them out of their misery. I did not give the sixth pig any; I quit feeding the sow and she got all right in a few days and lived to make an extra good hog. I quit feeding for scours then, and have fed for health and thrift since, and have been equally as successful in obtaining it; for I have not been bothered with scours since then.

Now, I believe nearly all the trouble of scours in young pigs is brought on by overfeeding the sow. I know how anxious a breeder generally is to push his pigs along; I know how many young breeders feel. They have bought a good sow or two, to start a herd, and they are going to give them special care and push their pigs from the start and make some extra good ones of them. I read that we should feed but little the first few days after the sow farrowed, and I tried it; I gave a little slop to my fine sows, when the pigs were but a few hours old. I could not call the sow out of bed, so I would drive her to the trough and get her to take just a little good slop, then she would go back and lie down; next morning I would drive her out to get just a little more good slop. I gave her but little, but that little was more than she wanted! So it went on. Now, if I had not been in such a hurry to feed that little slop, I would have had less trouble. Scours is the result of improper feeding of the sow, and if the sow is properly fed there will be no scours among the pigs. My guard against this trouble is to not overfeed the sow. If my sows farrow when there is grass for them, they are not fed any grain or slop for a week or ten days, but have all the grass they want.

A friend of mine in Illinois, once

quite a noted breeder of Berkshires, had the best litter of pigs he ever bred killed by an inexperienced man's feeding the sow five ears of corn. This sow was the sweepstakes sow at the Illinois and Iowa State fairs in her day. She was the dam of the first sow recorded in the American Berkshire record. She had her litter of five pigs by a fine imported boar. The breeder gave this man special orders not to feed this sow anything—that he would see to her himself.

All went well till the pigs were a week or ten days old, when he went one morning to her pen and she was just cleaning up a feed of corn. He asked his man why he had done this, and he said she was hungry and he only gave her five ears. She was not used to having corn, and my friend said to him: "You have killed this fine litter of pigs." He commenced then and there to try and save the pigs from the effects that were sure to follow. The corn fevered the sow's milk although he began at once to try to save the pigs; four of the pigs died and he raised the fifth pig only by taking it away from the sow and raising it by hand.

This I relate only to show what effect sometimes follows such changes, and to impress on the minds of the readers that such things should be guarded against.

The next trouble with young pigs is thumps. This trouble comes from the pigs getting too much milk and taking too little exercise. If the weather is bad, the pigs are apt to stay too much of the time in the bed and get too fat. When there is danger of this kind it is well to force the pigs to take more exercise, or keep them away from the sow part of the time each day, which will shut off their feed and they will take exercise trying to get back to the sow.

The next trouble with pigs is canker-sore mouth. I have not been bothered with this trouble, however. To doctor this, swab out the mouth with a solution of carbolic acid and borax.

A few years ago I had a sow that had a litter of ten fine, strong pigs; in a few days these pigs began to have very sore mouths and eyes; several of them went blind. I looked for the cause of this trouble and I found it to be in the bad. I had some old hay that was full of ragweed; I ran a lot of this through the cutter and gave the sow a bed of it. The result was that the dust and blossoms from the ragweed made the eyes and mouth sore. Four of this litter died and three of the others were blind for about two weeks and were badly stunted. I do not use litter for bedding now that has much ragweed in it; that is the only time I ever tried it.—Veteran Breeder, in American Swineherd.

Prevent Lying on Pigs.

H. D. Compton, Annes, Kan., tells the American Swineherd how he protects the pigs at farrowing time. He says:

There are several things to be taken into consideration in dealing with this question.

1. If your sow is of a cranky disposition you are up against a hard proposition.

2. If she has been improperly fed and handled during pregnancy, she will naturally be restless, thrash around a great deal at farrowing time, hurt some of the pigs and make them squeal; then she will get up and proceed to make her bed over again and when she lies down again the chances are you are minus several pigs.

Again, pigs from old sows have exceedingly sharp tusks, and if they are not cut off they will cause the sow to kill more or less of her litter. If you want to see a scrap to a finish, notice the actions of the second litter of pigs from a sow that was permitted to raise only two or three pigs at the first litter. The teats those pigs sucked will be developed and have more milk in them, and the way the second litter of pigs will fight for those teats is a caution. Therefore, a sow of that description is practically ruined for a brood sow. She will never raise a nice, even litter of pigs.

So much for and against the sow. Now for the farrowing pen.

I have been in the hog business a good many years, have tried all kinds of pens, from the rail pen covered with straw or hay with a dirt floor, to the double hoghouse with board floor and roof, but have never found anything the equal of the A-type farrowing pen with board floor. Of course it is wise to take all the precaution you can to save the little fellows, hence I always put in fenders.

Just before the sow is to farrow (and all hog men know pretty nearly when that will be—if they don't they are not hog men), raise the front of the house a little, the object being to compel the

SLOAN'S LINIMENT
CURES 50c. and \$1.00.
Swine Disease and Hog Cholera
Send for Circular with Directions.
Dr. EARL S. SLOAN, 615 Albany St., Boston, Mass.

DEATH TO HEAVES
Guaranteed
A VETERINARY SPECIFIC
14 years safe. One to two cans
will cure Heaves. \$1.00 per
can. Of dealers, or express
prepaid. Send for booklet.
The Newton Remedy Co., Toledo, O.

VETERINARY COURSE AT HOME.
\$1200 year and upwards can be made taking our Veterinary
Course at home during spare time; taught in simplest
English; Diploma granted; positions obtained successful students;
cost in reach of all; satisfaction guaranteed; particular
free. **ONTARIO VETERINARY CORRESPONDENCE SCHOOL**, Dept. 17, London, Canada.

PINK EYE CURE FOR HORSES AND CATTLE
Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when
quite milky. Sent prepaid for the price, \$1.
Address orders to **W. O. THURSTON**,
Elmdale, Kansas.

Ring-Bone
There is no case so old or
bad that we will not guarantee
Fleming's Spavin and Ringbone Paste
to remove the lameness and make the
horse go sound. Money refunded if it ever
fails. Easy to use and one to three 45 minute
applications cure. Works just as well on
Sidebone and Bone Spavin. Before ordering
or buying any kind of a remedy for any kind
of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser
Ninety-six pages of veterinary information,
with special attention to the treatment of
blemishes. Durably bound, indexed and
illustrated. Make a right beginning by
sending for this book.
FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

KRESO DIP KILLS LICE ON ALL LIVE STOCK EASY & SAFE TO USE

BLUE CATTLE LOUSE
KRESO DIP KILLS THIS AND ALL OTHERS
RED CATTLE LICE, HORSE LICE, HOG LICE, SHEEP LICE & TICKS, POULTRY LICE, DOG LICE AND FLEAS

Write For Free Booklets
For Sale By All Druggists

PARKE, DAVIS & CO.
Home Offices and Laboratories:
Detroit, Mich.
Branches: New York, Chicago, St. Louis, Boston,
Baltimore, New Orleans, Kansas City, Indianapolis,
Minneapolis, Memphis, U.S.A.; Walkerville,
Ontario, Montreal, Que.

Combination Thief-Proof Whip and Walking Stick
The Greatest Novelty of the age. No buggy is
complete without one. Price, \$1; postage paid to
any part of U. S. Address
E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

sow to lie down with her back from end of pen, as all stock when given their freedom always lie down with their back or head up hill, never the reverse. Should she lie down with her head up hill her back will be against the roof, which, owing to construction of the same, affords pigs a nice runway behind the sow.

Docking Horses.

EDITOR KANSAS FARMER:—What is the law in France about docking horses? Are all the horses fit for breeding purposes docked? In my neighborhood there are imported horses and some are docked and some are not.

W. M. HARSHBARGER,

Lincoln County.

This inquiry was referred to Col. J. W. Robison, of Eldorado, whose experience among the horse-breeders of France as well as his wide information from other sources makes him probably the best authority in Kansas. Colonel Robison replies as follows:

"I do not know of any law in France about docking, but it is the practice there to dock horses used either for work-horses, or for breeding-purposes, except some that are left especially for the American trade, to be exported to this country while they are still young.

"All the horses are usually docked whether used for saddle, harness, or work, and the work-horse is usually left entire.

J. W. ROBISON."

The Oklahoma Meeting and Sale.

During the week ending March 17 there was held the annual sale and special meeting of the Oklahoma Improved Stock Breeders' Association. This was the second annual exhibit which is called The Midland Live Stock Show. The association had provided most desirable quarters for its exhibit and sale at Colcord Park adjacent to the city and on the street-car line. There were more than 300 animals on exhibition contributed by the following well-known breeders.

Shorthorns.—S. T. Snodgrass, Gordon, Kansas; Fred Case, Harrisonville, Mo.; S. B. Findlay, Oklahoma City, Joseph Lyons, El Reno, Okla.; Harriman Brothers, Pilot Grove, Mo., Agriculture College, Stillwater, Okla., E. V. Johnson, Lexington, Okla., Frank B. Bouger, Lexington, Okla., D. E. Alkire, Lindsey, I. T., W. E. Williamson, Moore, Okla., W. S. Combs, Yukon, Okla.

Herefords.—S. L. Brock, Macon, Mo., R. W. Morrison, Calumet, Okla., T. E. Smith, Rolland, Okla., S. B. Finland, Oklahoma City.

Galloways.—S. M. Croft & Sons, Bluff City, Kans., G. M. Kellam, Richland, Kans., W. G. McCandless & Sons, Cotterton Falls, Kans., Geo. E. Cole, Topeka.

Jerseys.—C. E. Perfett, Golden, Colo., E. Bracht, Oklahoma City, Okla., S. J. Conner, Oklahoma City, Okla., Horace McBeth, Oklahoma City, Okla., W. B. Atchison, Hinton, Okla., University of Langston, Okla.

Aberdeen-Angus.—Parrish & Miller, Hudson, Kans., Geo. Kitchen, Jr., Dower, Mo., William J. Turpin, Carrollton, Mo.

O. I. C. Swine.—Casey & Vincent, Pawhuska, Okla., R. B. Gill, Oklahoma City, Okla.

Poland-Chinas.—W. S. Combs, Yukon, Okla., J. R. Gilliland & Son, Hart, I. T., W. E. Williamson, Moore, Okla.

Duroc-Jerseys.—Jos. Durrall, Billings, Okla., S. Young, Mustang, Okla., J. L. Holes, Oklahoma City, Okla.

During the week the Territory was in the grip of a blizzard which served to reduce the attendance very considerably and the prices realized at the pure-bred sales were somewhat disappointing. The Shorthorn sale was fairly well attended though the prices were not up to expectation. The crowd in attendance at the sale of the other breeds were all smaller and part of the sales ad to be abandoned.

The Shorthorn sale.—Fifty-three shorthorns were sold for \$5740, an average of \$108.40. The top bull of the sale was Doctor Archer 217445 who went to Sanford Smith, Carthage, Mo., for \$25. He was contributed by Harriman Brothers, Pilot Grove, Mo. The top cow was Lovely Bud contributed by Fred Case, Harrisonville, Mo., and sold to W. B. Combs, Yukon, Okla.; for \$500.

The Hereford sale. Twenty-two Herefords sold for \$1960, average \$89.10. The top bull of the sale was Distancer 204803 consigned by S. L. Brock, Macon, Mo., and sold to F. M. Gault, Oklahoma City, for \$200. The top cow was Julianne 120131 consigned by Walter B. Waddell, Lexington, Mo., and sold to Lawrence Rodke, Paoli, Indian Territory for \$150.

Only two head of Aberdeen-Angus cattle were sold as there seemed to be no buyers present. These two brought an average price of \$53.50.

But four galloways were disposed of and these averaged \$44.00 per head.

Thirty-nine head of Poland-Chinas sold for \$958, an average of \$24.56.

Only eight head of Duroc-Jerseys were sold and these brought \$238, an average of \$28.75.

Officers of the Oklahoma Improved Live Stock Breeders' Association were elected for the ensuing year as follows: President, E. Breacht, Oklahoma City, Okla.; vice-presidents, E. T. Alkire, Lindsay, I. T., W. W. Wyatt, Yale, Okla., W. S. Combs, Yukon, Okla., J. A. Paulin, Newkirk, Okla.; secretary, treasurer, J. A. Alderson, Pond Creek, Okla.; assistant secretary, F. D. Northrup, Oklahoma City, Okla.

Officers of the Oklahoma Shorthorn Breeders' Association were elected as follows:

President, E. E. Alkire, Lindsay, I. T., Vice-presidents, J. A. Alderson, Pond Creek, O. T., W. S. Combs, Yukon, O. T.

E. P. Connelly, Wellington, O. T., Calvin Dean, Newkirk, O. T., C. H. McAllister, Carmen, O. T.

Secretary-Treasurer, F. B. Linday, Oklahoma City, O. T.

The next meeting and sale will be held early in February, 1907.

The Two Days' Auction of High Class Herefords.

On April 4 and 5 there will occur at Kansas City, one of the most interesting Hereford sale events that has been held there within recent years. Gudgel & Simpson, Independence, Mo., consign three bulls and seven heifers that represent the type, character and quality for which this herd has become famous. They are intensely bred in that greatest of all Hereford strains of the present day, the Anxiety 4th, and are sired by Dandy Rex, Beau Dandy, Militant, Paladin, and Beau Donorus. Scott & March, Belton, Mo., consign three heifers and two bulls sired by Hesiod 29th and his son Majestic. Other sires represented in this consignment are March On, a son of March On, and Columbus 26th, a son of the noted Columbus. Dr. James E. Logan, Kansas City, Mo., consigns ten head consisting of three bulls and seven cows and heifers representing a concentration of the blood of the noted bull, Imp. The Grove 3d. They are sired mainly by St. Grove, a son of the noted bull St. Louis; Chester a son of Imp. Chesterfield; and Duke of Cumberland a grandson of Lord Wilton. A full list of consignors to the April 4 auction will be found in the advertisement in this issue, and the catalogue will reveal the fact that such noted sires are represented as Pathfinder a son of Imp. Improver; Bright Rex by the champion Dandy Rex; Governor Simpson a son of Lamplighter; Headlight tracing on side of both sire and dam to the most noted of Anxiety 4th bulls; Shadeland Dean 22, a celebrated sire; Sensation by Columbus 17th; Perfection Yet a son of the Champion Perfection; and Prince Improver by Improver.

In addition to the ten head that Dr. James E. Logan includes in the combination auction on April 4, he will also sell fifty head of exceedingly good ones on April 5. He catalogues nineteen bulls and thirty-one cows and heifers all of which are strong in the blood of the celebrated bull, The Grove 3d, imported by Mr. Culbertson and sold to head the great Shadeland herd of Adams Earl, at \$7,000, the highest price of that day for a bull of the breed. Dr. Logan's cattle are in the pink of condition and numbered among them are animals that could successfully compete at our great breeding shows. He has always purchased the best and has carefully bred them and cared for them and such an offering is what might be expected from such selection of foundation stock and such care in handling them.

One hundred and eight head of excellent cattle are catalogued for this two days' sale, consisting of forty-three bulls and sixty-five cows and heifers. Numerous high-class herd-headers are included and those in search of Herefords of either sex should not miss this event. Catalogues can be obtained by addressing C. R. Thomas, secretary, Kansas City, Mo., or W. C. McGavock, sale manager, Springfield, Ill.

The Ashcraft Shorthorn Sale.

On April 10, at the home farm near Atchison, Kansas, A. M. Ashcraft will hold a public sale of Shorthorn cattle of unusual merit. Mr. Ashcraft is an old time breeder who has spent years in building up one of the good herds of Shorthorns in the West, and his offering will be well worth going after. His sale will include 42 head of which 27 will be choice cows and heifers. These are dark red in color and very like their sire, Harmony's Knight 218509. There are also to be sold 15 bulls ranging from short yearlings to 2-year-olds. These are mostly sired by the same bull and have his short-legged, blocky, beefy characteristics. The cows and heifers in the sale have all been bred to the good Scotch bull Scottish Minstrel 234970 by Imported Scotch Mist. Free transportation will be furnished to all who call at Carter's livery barn in Atchison and every effort will be made to make the buyers comfortable.

Remember the date and be present or send your bids to either of the auctioneers. You can not afford to miss this sale.

The Nevius Sale of Shorthorns and Poland-Chinas.

C. S. Nevius, of Chiles, Kansas, held a sale of Shorthorn cattle and Poland-China swine at his farm near Chiles, Kansas, on March 12. The weather had been cold for some time and the day was uncomfortable. Good Poland-China breeders were therefore not in attendance in large numbers because they could not be induced to leave their farrowing sows in such weather. Thirty-four Poland-Chinas were sold in the forenoon for a total of \$790, an average of \$23.23.

Nearly all the purchasers of Shorthorns came from a distance and were able to secure bargains without number. Many of Mr. Nevius' show animals were included in the sale. The prices, however, did not run high and the owner thought it necessary to stop the sale after 31 head had been disposed of. The buyers seemed willing to take more animals at prices even with or slightly above the average of the sale. The top price for bulls was \$400 paid by J. H. Tough, of Lawrence, Kansas, for Happy Knight 223939 by Gallant Knight 124468, the great herd bull of T. K. Thompson and sons' herd. The top price for females was \$260 given for the Marr Emma heifer, Emma 20th, who went to J. W. Lamb, Holton, Kansas. The 2-year-old heifer, Rosa Sterne 11th, by Gallant Knight, sold to J. L.

Stratton, Ottawa, Kansas, for \$210, and a yearling heifer Knight's Lustre also by Gallant Knight sold for \$200 to C. J. Woods, Chiles, Kansas, who has the best herd of Polled Durham cattle in the West and who by this means will infuse some new blood from the best of Shorthorn families into his herd. The general average made on the sale was \$116. The females averaged about \$111 and the bulls averaged \$121.50.

Among the buyers were the following: J. S. Tough, Lawrence, Kans.; O. O. Wolf, Ottawa, Kans.; Brown Bros., same; J. L. Stratton, Ottawa, Kans.; J. W. Lamb, Holton, Kans.; C. J. Woods, Chiles, Kans.; H. M. Hill, La Fontaine, Kans.; Wm. Nevius, Chiles, Kans.; C. P. Shelton, Kans.; J. W. Harvey & Son, Maryville, Mo.; Joseph Porter, Ottawa, Kans.; E. R. Barker, Hillsdale, Kans.; J. N. Moody, Louisburg, Kans.; S. K. Trail, La Cygne, Kans.; W. J. White, Osawatomie, Kans.; Henry Prothe, Paola, Kans.; Bartlett Boice, Springhill, Kans.

Shorthorns at Fredonia.

S. C. Hanna, Howard, Kans., H. M. Hill, La Fontaine, Kans., E. S. Meyers, Chanute, Kans., and O. E. Morse and Son, Mound City, Kans., have combined the best animals in their herds in a sale to be held at Fredonia, Kansas, on April 13, under the management of H. L. Bachelder, Secretary of the Southeastern Kansas Improved Breeders' Association. The names of these consignors alone are enough to insure a good offering. Each of these men has contributed the best he has in his herd, and the offering at this sale will be an extraordinary one and the prices ought to run high. Animals sired by some of the best known Scotch and Cruickshank bulls are included as shown by their advertisement on another page. In quality this will undoubtedly be the best offering ever made by this association and one of the best to be made in the West this year. Mention the KANSAS FARMER and write to Mr. Bachelder or either of the consignors for catalogue.

Kansas Is It.

At the recent annual meeting of the Standard Poland-China Record Association, Kansas was given first place on the official roster for the next year. A. B. Garrison, of Beattie, Kansas, was elected president. The board of directors and other officers elected are as follows:

W. T. Garrett, Maryville; F. P. Robinson, same; E. E. Axline, Oak Grove. The balance of the board chosen were: E. R. Woodford, Shenandoah, Ia.; John Blain, Pawnee City, and S. McElveen of Fairfield, Neb.; and C. F. Hutchinson, of Belaire, Kans.; Geo. F. Woodworth of Maryville, Mo., was again chosen secretary, and C. D. Bellows treasurer, W. T. Garrett, president of board of directors.

Do Healthy Animals Need a Tonic?

This question is often raised among stock feeders when considering the use of stock foods. They ask the question, "Does a person in health need medicine?"

It is probably true that if stock were fed for the same purpose that the human being is nourished, there would be no occasion for the use of medicinal tonics under ordinary conditions.

We have most of us learned by experience the evil of over-eating, and endeavor to select foods most agreeable to our digestion. Furthermore, we exert an effort to consume only sufficient food to sustain life and repair waste. In fact, we do not aim at putting on weight, and in many cases just the opposite is hoped for, but if the cow, steer or hog would be given only sufficient food to sustain life and repair waste, no gain would be perceptible; we fully realize that the food consumed that doesn't produce additional weight or milk is entirely wasted, the profit, therefore, being derived from the food consumed in addition to that which is required to sustain life and repair tissue.

Over-feeding therefore, is a necessity, and the results similar, as in the case of the human. Then again, the animal has not the opportunity of selecting the foods most suitable to its digestion.

Medicinal stock-tonics, therefore, must be entitled to a place in the economy of skillful feeding, and the stock preparations that contain the ingredients that have been tested in the medical institutions of our country and found valuable, are being sought after by a large percentage of expert feeders.

Dr. Hess Stock Food is the produce of science; it is the result of Dr. Hess' twenty years' experience in the study and practice of medicine, both human and veterinary.

It contains the bitter tonics long known in medicine for improving the appetite and increasing the flow of juices necessary to assimilate.

For sale by All Druggists. Literature Free. Write to Dr. Hess, 823 W. Water St., Milwaukee, Wis.

Warranted
to give satisfaction.

**GOMBault'S CAUSTIC BALSAM**

A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio

Direct from Mills to You

We Pay the Freight!

Beacon-ite is a ready roofing made of the finest long wool fibre thoroughly saturated with a special preparation that makes it absolutely water-tight. Wind, rain, snow or sleet has no effect on it whatever. It will not rust like tin or rot like shingles. It can be applied by anyone to any kind of roof; we furnish all necessary nails and cement. All you need is a hammer.

Beacon-ite roofing will save you money in two ways:

First. By buying direct from the mills you save the jobbers and dealers profits.

Second. By putting it on yourself you save the expense of hiring a roofer.

We want to quote you our Beacon-ite prices. You will find them to be about one-half the cost of tin or shingles, and considerably less than any other ready roofs. We want to send you FREE samples of Beacon-ite so that you can compare its quality with others. If you want better, cheaper roofing send for our FREE samples.

BEACON-ITE MILLS, 106 N. Second St., St. Louis

PAROID

Before you buy roofing for any building, from a small poultry house to the largest mill or factory, it will pay you to get samples and complete proofs of quality from the oldest makers of ready roofing in America. (We originated the roll of roofing ready to lay with fixtures packed in the center.) Our concern was

Founded in 1817

We can show you why "Paroid" is the best of them all—lasts longer and saves most repairs. Drop us a postal today.

F. W. EIRD & SON,

East Walpole, Mass.

New York, Washington, Chicago, Hamilton, Ont.

ROOFING

BOOK FREE **FARM TELEPHONES** How to put them up—what they cost—why they save you money

all information and valuable book free.

Write to J. Andrus & Sons, 823 W. Water St., Milwaukee, Wis.

UNITARIAN Religious Literature

SENT FREE to all persons addressing Mrs. F. O. Leland, Concord, Mass.

BLACKLEGOIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill.

Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations.

For sale by All Druggists. Literature Free. Write for it.

PARKE, DAVIS & COMPANY.

DETROIT, MICHIGAN, U. S. A.

New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, St. Paul, U. S. A.

Walker, Louisville, Ky., Montreal, Que.

HORSE'S SORE SHOULDERS CURED FREE

Name your Dealer and this Paper and we will mail you a

FREE SAMPLE

SECURITY GALL CURE.

Our sore shoulders, backs or backs while harnessed or tied.

SECURITY REMEDY CO.

lation; it furnishes the animal system with iron, the greatest of blood and tissue builders; together with the nitrates of sodium and potassium, which assists nature in eliminating poisonous waste material from the system, and laxatives which regulate the bowels.

Anyone doubting the virtue of a formula of this character has only to refer to the medical authorities of the country or to their own physician or veterinarian.

If you have never used Dr. Hess' Stock Food, write to Drs. Hess & Clark, Ashland, Ohio.

100 pounds \$5.00; 25 pound pail \$1.60, smaller quantities at a slight advance.

If Dr. Hess Stock Food fails to increase growth and milk-production sufficient to pay for itself many times over, your money will be refunded.

This newspaper endorses our guarantee.

Gossip About Stock.

The KANSAS FARMER has inquiries for Russian wolf hounds. Any one who has such hounds will probably find buyers by using the "For Sale" column of the KANSAS FARMER.

Mr. T. P. Whittenburg, of Pleasant Hill, Mo., contributes a splendid herd bill to the Kansas City sale about which he writes as follows: "The Anxiety herd Hereford bull I have in the Combination sale at Kansas City on April 4, is certainly worthy of attention. He is a little over three years old and bred in the true blue Anxiety type and blood all through. He is just in good, strong, farm flesh, is a sure and good breeder, and is strictly straight, and all right in every way. I am selling him only because I must make a change as I have three lots of his calves on hand which are certainly good ones. Send for catalogue and examine his pedigree."

Mr. D. O. Bancroft, owner of Walnut Grove herd of Duroc-Jerseys at Downs, Kansas, has been reading about the large pigs mentioned by our subscribers in the KANSAS FARMER in several recent issues. He thinks he has a litter of nine Duroc-Jerseys that were sired by Reece's "Pride" 34715 and out of Dewey Reece 85416 that are as large and as good as anybody's 6-months-old pigs. These pigs were just six months old on March 18. The litter consists of 4 boars, 4 sows and one barrow. Their total weight is 1644 pounds, or an average of 182½ pounds. They have been grown on shelled corn and alfalfa hay and some milk and slop but have not been full-fed. Mr. Bancroft thinks they would easily average 225 pounds if they were fat. They are just in common stock condition. Let us hear from the next man.

A Document on Dip. One of the neatest documents of information for farmers that we have had the pleasure of examining lately, is the budget of facsimile letters of what users think of Dipolene Dip. Each letter is printed on a separate sheet of canary, onion-skin, bond-paper, the lot is then bound in a neat cover and tied with a dainty bit of baby ribbon.

After reading this bundle of letters we are convinced that every farmer should use Dipolene. Certainly the testimony of every witness in this case is conclusive evidence that it is a very effective remedy. And it is the unanimous verdict of the jury of American farmers that it will save thousands of dollars every year for the farmers who will use it.

We do not know whether or not the Marshall Oil Co. of Marshalltown, Ia., is prepared to send this document on dip to every farmer who wants it, but we do know that it would be a mighty good thing if every farmer could read these letters and we suggest that you write and ask them to send you one of these budgets. They will gladly send you a free sample of the dip; enough for you to give it a thorough test before you need buy any of it.

Sand-Papering Your Face.

You can get the hair off from your face with sand-paper. Probably you will lose the skin and a lot of bad language at the same time. For the purpose of shaving, common toilet and laundry soap is not much better than sand-paper. The hair comes off after a fashion, but your face is left red, sore and irritated. For easy and luxurious shaving you need a special soap. Williams' Shaving Soap is made for the face. Send to the J. B. Williams Co., Glastonbury, Conn., for a free trial sample as per their offer in another column. You will see that there is as much difference between real shaving soap and ordinary shaving soap, as there is between a Kentucky thoroughbred and a truck horse.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals a la carte. Ask for tickets via the Nickel Plate Road. Chicago depot, La Salle and Van Buren streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams street. Detailed information may be secured by addressing John V. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

Spokane, Wash., March 20.—L. McLean of Spokane, president of the Spokane Canal Company, will this year begin the irrigation of what he says is the largest peach orchard in the world. It will contain 2000 acres of land in the Wenatchee country, famous for its luscious peaches and big red apples. This will be the largest orchard of any kind in the State of Washington. This year 200 acres will be set out, and each succeeding year the acreage will be increased until the full tract is in orchard. The first trees planted will be in bearing at the end of the third year. A number of reservoirs will be constructed to supply water. All the land will be given to peaches except a few side-hill locations where grapes will be planted. It is believed that peaches can be furnished the market from the early part of June until the latter part of October.

David R. McGinnis, of Spokane, and his brother, J. W. McGinnis, of Waterville, are planning to put out an orchard of 450 acres near Orondo on the Columbia river 15 miles north of Wenatchee. This will be an orchard of winter apples and English walnuts. David R. McGinnis said to-day, "Land in this part of the State, when properly irrigated and cultivated, will pay interest on \$5000 an acre. Few dividends are larger than the profits of fruit raising in Washington."

Farmers have begun to learn that it pays to produce large crops. After enough corn has been produced on an acre of ground to pay the interest on the investment and the cost of the tending that acre, then each additional bushel means just that much profit.

If you are raising but forty bushels to the acre and it requires all of the forty bushels to pay the cost of raising it then there is no profit, but if you raise sixty bushels then you have twenty bushels clear to sell for profit. It costs no more to raise the sixty bushels than it does to raise the forty. The right kind of seed will produce that twenty bushels for the profit, and such seed is the Improved Yellow Leaming, Pride of the North and Reid's Yellow Dent raised, gathered and sorted by W. W. Vansant & Sons, of Farragut, Iowa. Their advertisement appears in another part of this paper. It will pay any farmer to write them.

Caustic Balsam Removed Cancer.

Toronto, Kans., June 21, 1904.
The Lawrence-Williams Co., Cleveland,
Ohio:

I have used Gombault's Caustic Balsam more or less for about twelve years and have had much success. The last bottle saved me about \$14 in my stock, and I fully believe that it cured a small cancer on my wife's hand. My belief is based on personal experience, as my father had had a cancer on his hand a year before, and this one was in every particular like it except not quite so large. The Balsam did the work and it has now been near eight months ago and no traces of it since. For proof of this statement you can write our druggist. Tom Finley, Toronto, Kans.
HARKER LOVETT.

Was Cured by Sloan's Liniment.

Dr. Earl S. Sloan,

Dear Sir:—I have been using and recommending your liniment in this section for some time. One of the most remarkable cures that I have known it to accomplish was in the case of Col. J. B. Brown, of Gainesville, Fla. He had entirely lost the use of his arm from Rheumatism. He began to use Sloan's Liniment and in ten days he was cured. I advise anyone who needs a good liniment to use Sloan's. Signed, J. M. Brown.

Branding Steers.

Did you ever brand a steer? Did the steer look happy and satisfied with life? Perhaps you feel about the same way when you shave. If so, stop using common soaps for shaving and try the only real shaving soap made especially for shaving by the J. B. Williams Co., of Glastonbury, Conn. If you once try it, you will never be satisfied with any other kind. That is why they are willing to send you a free trial sample as per their offer in another column. "Try it for your face's sake."

Spokane, Wash., March 20.—Of all wonders of the Pacific Northwest nothing interests the immigrants who are coming west at this time more than the beautiful apples which are raised in this state. The Northern Pacific news-agent at North Yakima, is supplied constantly with apples which he sells to tourists and home seekers. They are so large and fine in appearance that they are eagerly purchased. Hundreds of these apples are being returned by these immigrants, who ship them back to their friends to show the wonderful size and quality of the fruit. Sometimes they get to bidding against each other for large apples and run the price up to 20 cents and 30 cents apiece in order to get them as souvenirs. The agent makes no attempt to sell them except at train time.

The American Steel and Wire Co., has issued a neat little pamphlet which they name "Fence" and which is filled with interesting facts for users of wire fencing. It does not matter what kind of fence you use or buy, the facts given in "Fence" will be valuable. It is well worth sending for. It is free. Address The American Steel and Wire Co., The Rookery, Chicago, Ill., and a copy of this pamphlet will be sent you by return mail.

Gee Whiz washing machines are attracting the attention of enterprising housewives of Kansas who have much work to do and do it well with as little labor as possible. They are made by the Gee Whiz Manufacturing Company, Des Moines, Ia., and are very properly advertised in the KANSAS FARMER.

Every schoolboy knows that the fable of the fox and the sour grapes is inaccurate from a natural history point of view, says a London newspaper, and, as usual, every schoolboy is wrong. An eminent Oxford professor, on hearing the point discussed the other day, actually bought some grapes and then went to the Zoo, where he tried them on a fox, which ate them greedily!

Never set a friendly pace that you can not keep up.

SNAKES

are not found in the SNAKE RIVER VALLEY, but here is found the most beautiful tract of agricultural land in the United States, and you do your raining, and have no failures of crops, that's irrigation. No Cyclones or Blizzards. This country needs live, wide-awake men, who wish a new home in the rapidly developing west, and offers cheap land, good church and school facilities, and a chance to make money to those who are willing to work. St. Anthony, the County seat of Fremont County, Idaho, is a bright and growing town in the very heart of a rich and growing richer country, and if you wish reliable information in regard to prices, soil, climate and our prospects; write any of the following firms: First National Bank; C. C. Moore Real Estate Co.; Wm. D. Yager Livery Co.; Murphy & Bartlett, Cafe; Commercial National Bank; C. H. Moon, Farmer; Chas. H. Heritage, Riverside Hotel; Miller Bros., Grain Elevator; Skrait & Shell, General Merchandise; Chas. S. Watson, Druggist; Gray & Ross, Townsites; W. W. Youmans, Harness Store.

Getting What You Want

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and richest sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do.

Send for our booklet. Write for particulars. It will pay you. Address

LOS MOLINOS LAND CO., LOS MOLINOS, TEHAMA CO., CALIFORNIA.

AT KENNEWICK ON THE COLUMBIA.

The ideal climate, winters warm and balmy.

Under the Great Northern Pacific Canal.

The choicest irrigated land in the West.

Own a ten acre fruit ranch and be independent.

Why work for others; be brave and do as thousands have done before you. These men have not made a mistake in coming here, many are independent.

We produce the earliest fruit, berries and grapes grown in the West.

It is all that we claim for it. Write to

KENNEWICK LAND CO.,

KENNEWICK, WASHINGTON.

NAMPA, IDAHO

A railroad center of Southern Idaho, surrounded by 300,000 acres of magnificent farming and fruit lands. Only one-fourth of these lands are under cultivation. The UNITED STATES GOVERNMENT has appropriated \$11,000,000 to develop the water supply and work will begin in February this year. A beet sugar company has secured contracts on 6,000 acres of land and are now erecting a \$1,125,000 factory within the city limits and will handle the crop of 1906. We have just built an alfalfa meal plant to grind up the surplus hay and ship it away in sacks. A brewery company has just secured a site and will put up a \$90,000 plant. This will help the hop industry. A flour mill company is seeking a site and one will soon be located. You can not fail to see that all of these enterprises locating at the same time in a town of about 3,000 people will double and thruple its population in the next two or three years. We raise 5 to 8 tons of alfalfa per acre, 300 to 500 bushels of potatoes, two crops of timothy and clover, 30 to 60 bushels of wheat, 60 to 100 bushels of oats, 50 to 70 bushels of barley. All fruits raised to perfection. Write the NAMPA CHAMBER OF COMMERCE.

FOURTH ANNUAL SALE OF REGISTERED HEREFORDS,

BY THE

MARSHALL COUNTY HEREFORD ASSOCIATION

WILL BE HELD AT Blue Rapids, Kansas

THURSDAY, APRIL 5th, 1906.

32 HEAD OF BULLS

13 COWS and HEIFERS

45 head of registered Herefords, contributed by the following breeders: Miss Lou Goodwin, Miss Florence Preston, A. Borck, Brown Bros., E. R. Morgan, Cottrell Bros., F. W. Preston, L. P. Larson, Geo. E. Miller, McKee Bros., and W. A. Gilson.

These bulls are good enough to head anybody's herd. All who have attended the annual sales of the Marshall County Hereford Association know the high quality of the stuff sold there.

For Catalogue address

**F. W. PRESTON, Secy.,
BLUE RAPIDS, KAN.**

Auctioneers—Cols. R. E. Edmonson and Others.

Public Sale of Poland-China Hogs...

ON APRIL 4, 1906, I will sell at public sale at my farm, five miles southeast of Topeka, 13 head of bred sows and gilts and 7 males, 2 herd boars—Klondike Jr. 63129 and Proud Rye's Sunshine 63003, Ohio Record. Also 3 head of milch cows and 3 heifers which will give milk about the middle of the summer. One span of black horse mules coming two years old, well matched and dandies. One check-row, 2-horse power corn planter; one seed drill, 2-horse power, one 3-horse gasoline engine and circular saw; one grist mill; one 4-horse down-power, with 25 feet tumbling shaft and knuckles. I am going out of the stock business and give my attention to fruit and grass. Terms are cash or bankable note. Should anyone want credit, make it known before sale. Remember the date, Wednesday, April 4, 1906.

V. B. HOWEY, Proprietor, Topeka, Kan.
COL. C. M. CREWS, Auctioneer.

LUNCH AT NOON.

REAL ESTATE.

FOR SALE—A good wheat farm of 320 acres; 120 acres in wheat. Good improvements. Twenty dollars per acre; \$25 cash, the rest in yearly payments. Two miles north of Ellis. Address Jno. Yobsh, Ellis, Kansas.

SEVEN MILES FROM EMPORIA we have for sale at \$50 per acre 125 acres of creek bottom land with 2 wells, 2 windmills for stock, well and cistern at the house. House is two story, frame, shingle roof; 6 rooms and summer kitchen. Barn 32 by 30, large tool house, cattle sheds about 20 by 120. Stone wall along the entire north side. Large granary, Fairbanks scale, good timber, plenty for fuel; 10 acres growing alfalfa; 20 acres of pasture, good apple and pear orchard. One mile to school and 3 miles to the station. Telephone in the house—can talk to 2,800 people for 8¢ per year. Everything here is in good repair; orchards in their prime. Hurley & Jennings, Emporia, Kans.

FOR SALE—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

READ, CONSIDER, COME OR WRITE—80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

40-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$25 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realty Co., Clay Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P.O. Box 966, Wichita, Kans.

LAND FOR SALE—In western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house, convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

GEO. M. NOBLE & CO.
Real Estate, Loans, Insurance.
Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
810 Wainwright, St. Louis.

H. C. BOWMAN,
SHAWNEE COUNTY FARMS.
TOPEKA RESIDENCE AND MERCANTILE PROPERTY.
VACANT LOTS.
TEXAS RANCH LANDS,
42 Columbian Bldg., Topeka, Kans.

CASH FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 416 KANSAS AVENUE, Topeka, Kans.

REAL ESTATE.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 156 Wabash Avenue, Chicago.

FOR SALE. 640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write
STEVENS & RUBY, Stockton, Kans.
Mention Kansas Farmer.

NORTON COUNTY LAND We handle Norton County Lands, where alfalfa, corn and wheat is raised successfully. Norton County lies in the middle west, where we do not have drouths or hot winds. Write me for full particulars
J. W. Bressler, Clayton, Kansas

640 acres, half in cultivation, 150 acres in wheat, half to buyer, 150 acre spring crop, one-fourth to buyer, well, mill-tauk, grove; \$11 per acre; all smooth, best of soil, 5 miles to market.

Oakley Land and Investment Co.,
Oakley, Kansas

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. **Niquette Bros., Salina, Kansas.**

IF YOU WANT A HOME
Write **HAYES, "The Land Man,"**
Drawer K, - - Almena, Kans

Nemaha County Farms

Nemaha County, Kansas cannot be excelled in the production of Corn, Oats, Millet and Speltz. Here Alfalfa, Clover and Blue Grass have no equal. Write for prices and description.

KNIGHT & SPICKELMIER, Centralia, Kans.

Phillips County and Western Kansas

280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; my price \$25. 160 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 acre. W. B. Gaumer Realty Co., Phillipsburg, Kans.

Why Do So Many Men.....Toil For Others.....

Helping enlarge their bank accounts, when each and every man, can become a land owner by corresponding with H. P. Fitzgerald, who will sell you land for \$5 an acre, which will produce 30 bushels of wheat and 40 bushels of corn per acre. One crop pays for the land. Don't wait. Write today to H. P. Fitzgerald, Jamestown, Kans.

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, - - Kansas

If you have any farms, ranches, or city properties for sale or trade anywhere in the State, we would like to have you list the same with us by sending a thorough description together with lowest prices and best terms. We have a fine list of city properties in Topeka and farms around the city, some for trade.

MOON, CHARLES & MOON,
REAL ESTATE AGENTS.
116 E. Fifth St., Topeka, Kans.

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. **THE DOWNS REALTY CO.,**
Downs, Kansas.

Hurley & Jennings' Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate and Loan Co.

Holton, Kansas,
Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

Watch Tacoma Grow!

Population, 1900, 37,714
Population, 1900, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),
Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.

Mention Kansas Farmer when you write.

WE GIVE YOU TEN YEARS TIME

In which to pay for
Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices.

Write for full information. FREE.
THE UNION PACIFIC LAND CO.,
Department F. Omaha, Nebraska.

**HOBBS & DETWILER**

Real Estate Dealer Smith Center, Kans.

We handle Smith County Lands, located in the best corn county in Kansas. Write us for full particulars and complete land list.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

Partial List of Farm Lands For Sale By**Norton Land Company**

NORTON, KANSAS

No. 106—160 acres, 7 miles out, farm house with four rooms, good stable and sheds, all fenced and cross fenced, 80 acres in cultivation, good well and mill, 10 acres alfalfa, two pastures, a good bargain at \$20 per acre. One-half cash, balance to suit purchaser, possession at once if sold soon.

No. 109—320 acres farm, 200 acres in cultivation, good new frame house, 120 acres pasture all fenced, good well and windmill, stable, sheds, etc. Price \$6,500. Terms given.

No. 196—160 acre farm, 120 acres in cultivation all in wheat, one-half of wheat goes with farm. This is a number one farm practically all smooth, no buildings. Price \$3,500. One-half cash.

No. 209—680 acre ranch, 110 in cultivation, 20 acres in alfalfa all fenced and cross fenced, new frame house 24x24, barn 16x36, two sheds, feed lots, corrals, etc. Price \$14 per acre if taken soon.

No. 182—160 acres, 100 acres in cultivation, all smooth land, good house with 5 rooms, stable, sheds, corral, etc., all fenced, some alfalfa. Price \$26 per acre.

No. 125—40 acres, close in, fine land, mostly alfalfa. Price \$1,700.

No. 175—160 acres in cultivation, balance pasture, all fenced, frame house with four rooms, good well and windmill, stabling, corral, all smooth land. Price \$4,000. \$2,400 cash, balance on time to suit.

No. 206—320 acres, 200 acres in cultivation, balance pasture all fenced, frame house with 4 rooms, granaries, sheds for 100 head of cattle, stable, stable for 8 head of horses, well and windmill, fine grove. Price \$22.50 per acre, within three miles of station.

A GOOD HOME PLACE AT A GREAT BARGAIN.

160 acres, well improved, good frame house with four rooms; good barn, room for 20 head of horses, granary room for 7,000 bushels of grain, fine bearing orchard, all kinds of fruit. Two feed lots, corn cribs, etc. Well and windmill, 300 barrels' tank room, 40 acres alfalfa, all fenced and cross fenced, all smooth land. One of the best farms in the county and situated in as good a farming community as there is in the West. This farm can be bought for \$5,500 if taken within the next 30 days. If you want this, a real good farm, well improved, come and see this one quick.

A CHOICE FARM OF 320 ACRES.

All smooth land, fenced all around with three wires and good cedar posts. Good frame house with four rooms, good barn for six head of horses, granary for 4,000 bushels of grain, with drive between, all new. Well and windmill, two fifty barrel tanks. Fine young orchard, 45 acres in alfalfa, 40 acres sown to rye, 160 acres pasture. This land can all be farmed and there is no better land in the country. Telephone in house, and on rural route. This farm can be bought for \$8,500 if taken soon. If you are looking for a number one all round farm, it will pay you to see this.

NORTON LAND CO., Norton, Kans.

FOR SALE

Farm 2,160 acres, 570 acres in wheat, 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

EVERY YEAR
—IN THE
HARVEST YEAR

Greatest Irrigated District
ON THE
American Continent

Southern Alberta, Canada

The land famous for its tremendous crops of Hard Winter Wheat, Alfalfa and Sugar Beets.

100.000 Acres

Of the million and a half acres eventually to be placed "under ditch" by the Canadian Pacific Railway

Ready for Sale
AT FROM
\$18.00 to \$25.00 an Acre

On Exceptionally Easy Terms

This, the best irrigated land in the world, lies immediately north of the main line of the

Canadian Pacific Ry., at Gleichen, Alberta

and extends back 10 miles in a solid block.

The Canals and Laterals are to be maintained forever by the Canadian Pacific Railway

at a nominal cost of 50 cents per acre per annum.

TERMS OF SALE:

One-quarter cash, the balance in five equal annual installments at 6 per cent interest. This land will be sold in tracts of 80 acres, and as much more as you desire.

Act now, don't wait until the choicest occasions are taken.

For further particulars and for certificate for low railroad rates, write

Canadian Pacific Irrigation Colonization Company, Ltd.

Calgary, Alberta, Canada.

NO ONE WHO VISITS COLORADO

CAN AFFORD TO MISS A TRIP OVER THE

SWITZERLAND TRAIL OF AMERICA

The Colorado and Northwestern R. R.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of the Kansas Farmer. Kindly give the age, color, and sex of the animals, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of the Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in the Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Lame Mare.—My 13-year-old grey driving mare became lame when driven about a month ago; she went one-half mile and became so lame she could go no further. I turned her loose and she lay down and acted as though she might take lockjaw. She was bad for an hour then seemed to be all right. I did not use her again for a week. I got on her to ride to a neighbor's and she again became lame; she holds her foot up; the trouble seems to be in the hip. I examined the foot and could find nothing. I have used turpentine and different liniments on the limb.

Edna, Kans.

Answer.—This kind of lameness is very characteristic in animals which have the blood vessels closed. It prevents the normal amount of blood from supplying the affected limb, so that when the animal moves, there not being sufficient blood brought to the limb, it becomes numb, or in other words goes to sleep. In time, if the circulation is not restored to its normal condition, blood vessels in that region will supply the limb with some blood but not enough to give the animal its former usefulness. Mares in this condition may be kept for breeding purposes, but can not be useful as general-purpose animals.

Lame Mule.—I have a 6-year-old mule lately shipped 200 miles; he now goes lame in one hind leg; when standing he rests the foot on the toe. Horsemen say the cord is strained. The flesh is shrinking on the point of the hip. What is the trouble, and how shall I treat it? There is some swelling on the inside of the stifle joint. The mule is in good flesh.

J. B. W.

Sylvia, Kans.

Answer.—There has evidently been some bruising or straining of some of the muscles of the mule's limb. I would suggest that you apply a stimulating liniment to the affected area, rubbing it in thoroughly daily until the part is blistered.

Palisade Worm.—My colt is thin in flesh; it does not have a very good appetite; I have been feeding oats, corn, prairie hay and Kafir-corn; the colt's bowels move freely, and there is a very small red worm in the manure; also a bad odor. What shall I do for the colt?

Elk City, Kans.

Answer.—Your colt is evidently affected with the *Strongylus armatus* worm which is causing the trouble. We will send a press bulletin describing this condition fully, which will give you a better idea of the disease than I can in these columns.

Ailing Steer.—After being on full feed for three months, one of my steers commenced to cough, and was troubled in swallowing; then the left side of the neck and throat became swollen just back of the lower jaw; the swelling is hard but does not resemble lumpjaw; a veterinarian pronounced it quinsy, but his treatment does not help him; I have treated the steer about two weeks and he has been ailing for four weeks.

A SUBSCRIBER.

Ottawa, Kans.

Answer.—Apply the following liniment to the steer's throat: 6 ounces of turpentine, 2 ounces tincture of cantharides, 8 ounces of raw linseed oil; mix and apply this to throat daily.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo.

Monday, March 19, 1906.

Although the first of last week developed lower prices of beef steers, the situation improved after Tuesday, and about all of the loss was regained by the close of the week, account of smaller receipts. Cows and heifers sold strong all along, and gained 10@20c for the week. Stockers and feeders continued dull, except for the most desirable kinds; these found a ready sale, and the accumulation at the end of the week was smaller than the end of the week before. Of course, the big snow storm of yesterday will hurt the market for country grades this week, and parties who can handle them would make a hit by buying now.

The run to-day is heavy at 10,000

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topoka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run off the paper, \$1.82 per inch per week.
Special reading notices, 36 cents per line.
Special rates for breeders of pure-bred stock.
Special Want Column advertisements, 10 cents per line or seven words per week. Cash with the order.
Electrotype must have metal base.
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

HOLSTEIN—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Heater Eclipse 38761 in service. A. L. Wynkoop Benders, Kans.

FOR SALE Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

MILK COWS FOR SALE—By V. B. Howey, Route 1, Topeka, Kansas.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th; also car high grade yearling bulls. Duff & Sons, Norton, Kansas.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FIVE REGISTERED HEREFORD BULLS for sale, all good individuals. Eight months, 9 months, 1 year, 20 months, and 4 years are their respective ages. Cooper Monroe, Lyons, Kans., R. F. D. 5.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, or dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

FOR SALE—The great show and breeding bull, 198 Duke Wildwood 148143, that took 4th place at the Kansas City Royal in 1904; also 20 cows and heifers all choice individuals, some show stuff. George Manville, Fawcette, Mo.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

head, considering the storm yesterday. Other markets also report liberal supplies, and prices are weak to 10c lower to-day. Trains are delayed considerably, and a certain share of the earlier arrivals sold steady. Cows and butcher stuff have shown the greatest strength lately, choice Hereford heifers at \$5.25 last week, and most of the good heifers at \$4.40@4.75. Top cows sold at \$4.60, and bulk of cows \$3.25@4.15, top steers last week \$5.75 on several days, top to-day \$5.50, a good percentage at \$5.25 and more, bulk at \$4.70 and upwards. Bulls range from \$3.15@4, veals weak at \$5@6.75, stock calves changed little in price, but movement was free last of the week, stockers and feeders \$2.75@4.50, which is 25@40c lower than two weeks ago.

Packers made open rebellion last week, and delivered an ultimatum that hogs must be secured cheaper or they could not handle them. The result of their big fight was temporary lower prices, but on Saturday \$6.35 was paid for top hogs, equal to the highest this season. Run to-day is 5,000 head, market 5@10c lower, top \$6.25, bulk \$6.05@6.20, light hogs up to \$6.10, pigs around \$5.25. Supply last week 42,000 head, about like previous week, and 3,000 more than same week last year.

Sheep and lambs sold strong first of

last week, but closed the week 10@20c lower, lambs showing most loss and wethers least. Supply to-day is 7,000 head, market 5@10c lower. Lambs are very good quality, and are down so near prices of aged sheep that any decline in the market will have to include everything. Lambs now sell at \$6@6.50, wethers and yearlings bring \$5.40@5.90, ewes \$4.50@5.25. J. A. RICKART.

Kansas City Grain Market.

Kansas City, March 19, 1906. Receipts of wheat in Kansas City today were 89 cars; Saturday's inspections were 13 cars. The market was dull. Demand for good milling wheat was fair and holders asked 1c advance. The sales were: No. 2 hard, 2 cars 32c, 1 car 79 1/4c, 3 cars 79c, 2 cars 78c; No. 3 hard, 1 car 78c, 1 car 77c, 1

CATTLE.

FOR SALE—Hereford bulls, choice and blocky, aged 8 months to 2 years. J. W. Tolman, Hope, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGRIED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Reutz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Criekshank bull, Violet Prince No. 145047. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (Imported); granddams held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

HELP WANTED.

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 ranch, Bliss, O. T.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kausas Ave., Topeka, Kans.

WANTED—Single man on farm, must be congenial with stock. F. M. Linscott, Farmington, Kan.

HORSES AND MULES.

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,300 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE OR TRADE—for stock cattle, two Jacks coming 3 years old, 15 1/2 hands high; weight 950 pounds; also one 4 year old jack 14 hands high. Good performers. Also pacing-bred stallion by Silkwood, 16 1/2 hands high, weight 1,250 pounds. Add directions J. C. Hentzler, R., Topeka, Kans.

FOR SALE—at reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swayedback. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

STRAYED OR STOLEN from my farm 2 bay horses, weight about 14 or 15 hundred pounds, one with blaze face, glass eyes, feet white; other, one hind foot white, patch of hair off right jaw. Suitable reward for return. Allen Fleisch, Route 1, Gardfield, Pawnee County, Kans.

ENSILAGE CUTTER—For sale a nearly new Small cutter, self feed, 10 ton capacity per hour. Will sell at a bargain. Address E. W. Adams Berryton, Kans. Topeka Independent phone 8502

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 to as high as \$155.50 per month. Wanted—400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago Ill.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Endora, Kansas.

POULTRY.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Hettie's strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

SCOTCH COLLIE PUPS for sale, \$4 and \$5 each. Pedigrees furnished. G. B. Gresham, Box 102, Bucklin, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale; also a few cockerels. Bertha Gresham, Bucklin, Kansas.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kansas.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincey, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94 1/2 to 96 1/2. Eggs, \$2 per 15; \$5 per 45. Chris Bearman, Ottawa, Kansas.

Neosho Poultry Yards

Rose Comb R. I. Reds exclusively. Two first, one second and one third prizes at the Emporia, Dec. 1906, Show. One pen of fine red pullets and hens mated to a red male for producing red pullet eggs from this yard. \$2 per 15, others at \$1.50. J. W. Swartz, Americus, Kansas.

MISCELLANEOUS.

AMERICAN HERBS Cure acute and chronic diarrhea. Used many years by a successful New York physician. 25 cents a package. M. B. Noble, 700 Bostwick St., Grand Rapids, Mich.

GOOD DAIRY BUSINESS and route for sale or trade (only route in county seat); business amounts to five thousand yearly. Address D. S. Burnham, Minneapolis, Kans.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3 1/2x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

WANTED—At once, sound young man for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

WANTED—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago Ill.

Stray List

Week Ending March 15.

Sheridan County—Miles Gray, Clerk.

PONY—Taken up by Miles F. Riley in Prairie Dog tp., April 14, 1905, one black female pony, weight 700 to 800 pounds, blaze face and 2 white hind feet.

The farmer's guide to success in farming, 200 pages 10x13 inches. 2 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free.

Send us ten 2-cent stamps and we will mail you our latest book—a 50 page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$4.00.

Address H. G. Phelps & Co., Boston, Mass.

The farmer's guide to success in farming, 200 pages 10x13 inches. 2 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free.

Send us ten 2-cent stamps and we will mail you our latest book—a 50 page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$4.00.

Address H. G. Phelps & Co., Boston, Mass.

The farmer's guide to success in farming, 200 pages 10x13 inches. 2 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free.

Send us ten 2-cent stamps and we will mail you our latest book—a 50 page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$4.00.

Winter Vegetables.
(Continued from page 323.)

moisten the roots, but do not wet the tops or they will rot. Cover the trench with boards, and then with two or three inches of soil, leaving small holes in the end for ventilation. If the weather becomes severely cold, it may be necessary to add more covering. The celery will soon bleach if put away in this manner. It can be bleached in the cellar, but is more apt to rot and wilt.

PARSNIPS.

Parsnips should be planted as early in the spring as land can be worked, in rows fifteen inches apart and thinned, after they come up, to two or three inches in the row. Keep them cultivated and free from weeds while they are small, and they will take care of themselves the rest of the season. In the fall or early winter after there has been some freezing, dig what you want to use during the winter. They can either be kept in a cold cellar or buried.

CARROTS.

Sow the first of April in rows fourteen inches apart, and cultivate the same as parsnips. They must be dug in the fall before hard freezing and may be kept in a cold cellar or buried.

SALSIFY.

Sow early in spring in rows fourteen inches apart and cultivate the same as parsnips. In the fall you should take up what you wish to use and pack in boxes with some soil and keep in a cool cellar.

Salsify and parsnips are both hardy and can be left in the ground all winter if desired.

Turnips for winter use, globe varieties preferred, should be sown the middle of August and allowed to grow until freezing weather begins. They can either be kept in a cold cellar or buried.

Catalpa Speciosa.

E. F. STEPHENS, CRETE, NEB.

It is a serious misfortune that the reputation of the catalpa has been sadly discredited by the use of the Catalpa bignonioides and its hybrids for the true Catalpa speciosa, the hardy Northern variety. The Catalpa speciosa is erect in its habit of growth. The trees attain a height of sixty feet and a diameter of three to four feet. The wood has remarkable durability.

A Catalpa speciosa telegraph pole fifty feet in height that had been in use forty years and still sound, was exhibited at the St. Louis Exposition. Fence-rails forty years in service, railroad ties subjected to heavy traffic for thirty years still retaining their original soundness, were also included in the exhibit.

A remarkable instance showing the durability of catalpa wood comes from Missouri. In 1811 an earthquake near New Madrid sunk considerable areas of catalpa groves. Water flowed in over these sunken timber lands, killing the trees. In 1888 trees of the Catalpa speciosa were yet standing undecayed after a space of seventy-seven years.

PURITY OF SEED NECESSARY.

The Catalpa speciosa seeds very sparingly. Because of the erect habit of the trees, seeds are not as readily gathered as from the low-branched, spreading Catalpa bignonioides. The latter and its hybrids yield seed very freely. Since these are so much more easily and cheaply gathered, a large share of the catalpa seed in the hands of seedsmen is gathered from the bignonioides or its hybrids instead of from the speciosa. Seed of the latter is not infrequently worth \$1 per pound while the seed of the bignonioides can be purchased for twenty cents per pound. Not all seedsmen are sufficiently careful to keep these varieties distinct. This has led to the planting of great quantities of trees which were not of the correct type. These have caused grievous disappointment and greatly harmed the reputation of the true speciosa.

In discriminating between the seed of the two varieties it is well to bear in mind that the speciosa blooms earlier than the bignonioides. The seed-pods of the speciosa are also larger and longer.

CATALPA VALUABLE TIMBER.

At the Dayton, Ohio, car works, the wood of the catalpa is used for inside finishing of passenger coaches. The timber possesses all the requirements of such work, being susceptible to a fine finish. Furniture factories also utilize catalpa wood in the making of chairs and desks. As timber the posts will endure two or three times as long as the oak.

Twenty years ago the writer planted groves near Crete, Neb., on the land of the late Thomas Doane, then superintendent of the Burlington system. Twenty-six years ago a farmer planted a catalpa grove of two and one-fourth acres in Southeastern Nebraska. This grove was planted in one corner of the farm covering a ravine not convenient for farm crops. Timber to the value of \$77 per acre has been sold therefrom and a careful estimate shows the value of the remaining timber to be \$200 per acre.

A gentleman in Butler County, Nebraska, had a fifteen-acre grove of catalpa planted nineteen years ago. While growing, it protected a corn-field from the aridity of the southerly winds materially increasing the yield of the field. This farmer is now selling the timber for fence-posts, realizing a value of \$150 per acre.

A Pawnee County, Nebraska, grove, planted fifteen years ago, is now being cut and marketed for fence-posts. The local price realized is eight cents for fence-posts three inches in diameter and twelve and a half cents for four-inch posts. On this basis there can be cut in this grove at this time timber to the value of nearly \$200 per acre.

The catalpa reproduces itself rapidly by suckers from the stump and thus produces the second growth more quickly than the first. This timber appreciates fertile soil and under favorable conditions grows two or three times faster than on poorer soil. To secure speedy and most profitable returns, it is wise to plant on land of good quality. It, however, thrives, though more slowly, on the poorest hilltops. This tree transplants more safely than almost any other tree because of its heavy, fleshy roots. It can be safely transplanted as street trees even after attaining large size. Forest plantations are usually planted with seedlings of the age of one year.

Uncle Sam at Garden City, Kans.

Plans and specifications for the machinery for the Garden City irrigation project in Western Kansas have been approved by a board of engineers, and bids will be opened at Chicago on May 28 for the contract. This irrigation project is not one of the large enterprises which the reclamation service is developing. It is, however, attracting considerable attention on account of the numerous novel features involved in its construction. The water must be recovered from the underflow waters of the Arkansas Valley, which lie in gravel deposits below the bed of the river and under the adjacent valley. It is, therefore, necessary to sink several hundred wells from which the water will be pumped and discharged into a collecting conduit. The wells are scattered along a line nearly five miles long. The power is generated at a single central plant situated on the railroad, and then is distributed by electricity to the wells.

It is the first National reclamation project to be authorized in which it is necessary to pump water, and is the only project in which the water must be recovered from wells and not from a flowing surface stream of water. On this account much interest is taken in the project by people in Western Kansas and Nebraska. They believe that the demonstration to be made will be of value to many other communities situated similarly to that at Garden City.

Applications for water under this project have been made by the owners of more than 12,000 acres of land to be fenced, and the community is very enthusiastic concerning the future success of irrigation in the Arkansas Valley. Very large crops of wheat can be grown on the lands under this project, if a small amount of water is available in the fall and spring. Garden City has long been famous as an alfalfa center. This location seems to be especially well adapted to the maturing of the seed-crop of alfalfa, which has always paid well there. A sugar factory is being constructed at Garden City, where those who desire to raise sugar-beets will find a market for their crop.

Never enter a sick room in a state of perspiration (to remain for any time), for when the body becomes cold it is in a state likely to absorb the infection; nor visit a sick person—if the complaint be of a contagious nature—with an empty stomach. In attending a sick person, do not stand between the sick person and any fire that may be in the room, as the heat of the fire will draw the infectious vapor in that direction.

Williams' Shaving Soap

The lather from cheap, common soap is thin, harsh and quickly drying. If used for shaving it burns and irritates the face. The lather from Williams' Shaving Soap is rich, thick, creamy and emollient.

It makes easy work for the razor and it keeps the face comfortable and healthy. Which do you choose?

**Send 2c. stamp for trial sample
(enough for 50 shaves).**

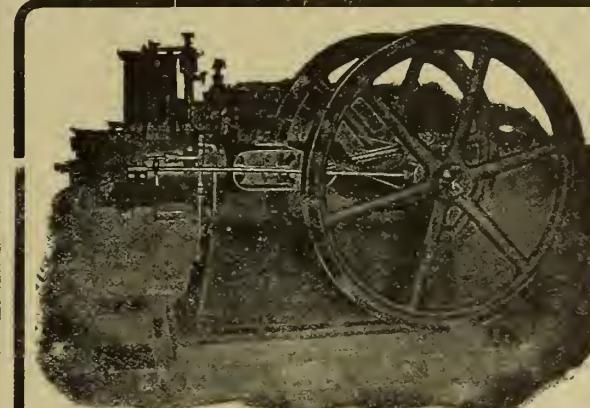
Williams' Barbers' Bar, Yankee, Mug, Quick & Easy Shaving Soaps and Williams' Shaving Sticks.—Sold everywhere. Address,

THE J. B. WILLIAMS COMPANY,
Dept. A, Glastonbury, Conn.

We Are Growers of Pure-Bred, Medal-Winning Fire-Dried Seed Corn.

Twenty-five varieties. Will send you one of our new 1906 catalogues and four varieties, two white and two yellow, of what we consider the best for your section, or will send samples of any variety you may desire. **MANY FARMERS ARE DOUBLING THEIR YIELD WITH OUR SEED.** Our catalogue of farm, field and garden seeds will tell you why this is, and how you can do the same. Sent free on application.

J. B. ARMSTRONG & SON, Shenandoah, Ia.



Dempster Mill Mfg. Co.

Manufacturers of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

"Dempster Gasoline Engines 2 to 20
I. P.—2 and 4 cycle Horizontal or Vertical—for any duty."

Western Made
and
Well Made

Factory, BEATRICE, NEB.

Branches—KANSAS CITY, Mo., Omaha,
Neb., SIOUX FALLS, South Dakota.



DEMPSTER IMPROVED
STEEL WIND MILL.
No 7
DEMPSTER
MILL MFG. CO., BEATRICE, NEB.
ROLLER RIM GEARS
THEY STOP THE NOISE AND LESSEN THE WEAR.
LATEST, STRONGEST, BEST.
FACTORY BEATRICE, NEB.

It Will Pay You To Investigate

the merits of the

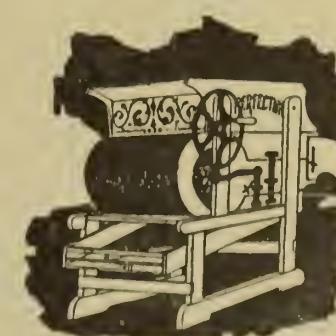
"PERFECTION"

CLEANER,

SEPARATOR,

GRADER.

\$



\$

This will clean, grade and separate all kinds of seed and grain. It will grade your seed so that you can get an even stand. It will take out all undeveloped seed. You should have the machine on your farm. It will save and make you money.

"WRITE NOW"

For prices and seed samples of how the Perfection does its work.

THE LEWIS, TUTTLE MFG. CO., 305 Kansas Avenue, Topeka, Ks.

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Crimson Wonder 38755 Herd
Will have something fine to offer. Can furnish trios not akin sired by Crimson Wonder 38755 and Kerr's Champion 28365.
Mr. & Mrs. Henry Shrader, Wauwata, Kas.

Orchard Hill Herd of Duroc-Jerseys.
Some fine summer and fall males for sale.
Summer gilts are being bred.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled
A few sprung boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

HIGHLAND HERD OF DUCOCS

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

Egypt Valley Durocs
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

POLAND-CHINAS.

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 33849; also a boar pig by Compromise 58203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beatty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beatty's Extension 27986, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

E. E. Axline's Public Sale of Poland-Chinas

AT

Independence, Mo., April 5, 1906

THIRTY HEAD—10 bred gilts, 10 open gilts, 10 choice young boars. Send for catalogue.

E. E. AXLINE, - Oak Grove, Missouri

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented.
H. N. HOLDEMAN, R. R. No. Girard, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans.

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herds. Sows and gilts of choicest breeding bred for sale, to either Address

G. M. Hebbard, Route 2, Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32604, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

200 Head Poland-Chinas

Klever's Perfection 32855, sire of my show herd. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, 1-2 Mile Sedgwick, Kansas.

POLAND-CHINA BRED SOWS

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kans.

CHESTER WHITES.**O. I. C. SWINE**

Choice young stock of both sexes for sale at very low prices.
S. W. ARTZ, Larned, Kans.

World's Fair CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs
Scotch Collie Dogs

B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulna, Silver Mina and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

FIFTH TERM JONES' NATIONAL SCHOOL

of Auctioneering and Oratory
Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states.

For Catalogues write Carey M. Jones, President

When writing advertisers please mention this paper.

BERKSHIRES.**EAST RENO BERKSHIRES.**

FOR SALE—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willem, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd. Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72886. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,
Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES
Imported Blood

30 extra choice boars, 100 to 150 pounds.
40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Russell, Kans.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless condition, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 3346, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 0134, by Hall's 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.**Aberdeen-Angus Cattle**

25 Aberdeen-Angus bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kans.

THE SUNFLOWER HERD PURE-BRED**Angus Cattle**

Herd headed by HALE LAD 80445. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

RED POLLS.

ENGLISH RED POLLED CATTLE—Purchased by Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, ROUTE 1, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle

Young Stock for sale.

WILKIE BLAIR, Girard, Kansas

RED POLLED CATTLE

Of the choicest straws and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens

Address, S. C. BARTLETT, Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM**Polled Durhams**

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

GALLOWAYS.

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, FURLEY, KANSAS.

Breeder of Galloway Cattle

HEREFORDS.**Registered Herefords**

Individual merit and choicest breeding. Dale Duplicate 2d at head of herd. Correspondence solicited.

A. JOHNSON, - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56001 and Lord Albert 131557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 66634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

SHORTHORNS.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by

L. A. MEAD, Kingsdown, Ford County, Kansas

For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM

JOHN REGIER, Prop., Whitewater, Kans. Breeder of thick-fleshed, early-maturing Shorthorn cattle.

NONPAREIL STAR 188488 at head of herd.

J. L. MILLER & SON, Muscotah, Kansas. Breeders of Shorthorn cattle. Six coming yearling bulls for sale at reasonable prices. These animals are Rose of Sharon foundation and are fine individuals and sired by The Champion of Delaney Valley 154959, a son of Gentlemen 126072, he by Red Knight bred by W. A. Harris.

SHORTHORNS.**Registered Shorthorn Cattle****Duroc-Jersey Swine**

Also choice B. P. Rocks. All Stock fashionable bred, and choice individuals. For Sale—One July 27, '08 bull; price, \$100. Eggs, Bradley matting, #2 per 15; range eggs, \$1.50 per 15; \$5 per 100.

Newton Bros., Whiting, Kansas

Pearl Shorthorn Herd

Forty Young Bulls For Sale—Ranging from 6 to 24 months old and sired by the noted Scotch bulls, Baron Ury 2d 124970, Sunflower's Boy 127337, and Bold, Kuhight 179054. Address

C. W. Taylor

(Wire or Phone), Pearl, Dickinson County, (Mail Route No. 2), Enterprise, Kansas.

Cedar Heights Shorthorns

Scotch bulls' in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds**of Shorthorns and Berkshires**

Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. RAYER,
Route 1, Yates Center, Kans.

Alysdale Herd
SHORTHORNS

Headed by the great Cruikshank bull, Prince Consort 187008, sired by Imported Prince of Perth 153879 and out of own sister of Lavender Viscount 124755. 3 Fine Young Bulls—13 to 16 months old, for sale, at very reasonable prices.

Sired by such bulls as Lord Mayer, Mayer Valentine, and Proud Knight.

C. W. MERRIAM
Columbian Bldg., Topeka, Kansas

HOLSTEINS.

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young Bulls and a few young cows and
heifers for sale.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

REGISTERED BLACK MAMMOTH
and **CATALONIAN JACKS, SADDLE**
and **TROTTING HORSES**

The best in the state and at a low price. Come, or write for prices on what you want.
G. A. FEWELL
LEETON, JOHNSON CO., Mo.

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sexes. Also Shorthorn cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. Thisler, Chapman, Kas.**One Pair Black Percheron Mares**

Eligible to registry, weight about 1,700 pounds

4 and 10 years of age.

One Black Percheron Stallion

Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

Percheron Stallions
FOR SALE

Two blacks, 1 steel gray. Colonel Carter 27952 by Titus 17122 (36778), he by Cyrus (1997), he by Sultan (4713), he by Bayard (8495), he by a son Jean Le Blanc (739). Dam Camille 14963, by Brilliant 1271 (755), he by Brilliant 1899 (756), he by Coco II (714), he by Vieux-Chaslin (713), he by Coco (712), he by Mignon (715), he by Jean LeBlanc (739); 2d dam by Ceres 9053 (9096); 3d dam, Madelon (8898) by Tavora 666 (725). All about the same being sired by Titus 17122 (36778) and dams got by Brilliant 1271 (755).

Wyatt Stanley

ANTHONY, KANSAS

Collections made in all parts of the United States
No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

TOPEKA. KANSAS

Special attention given to stock-breeders accounts.
Reference furnished on application.

When writing advertisers please
mention this paper.

LIVE-STOCK AUCTIONEERS.**LIVE-STOCK AUCTIONEERS.****JOHN D. SNYDER,**

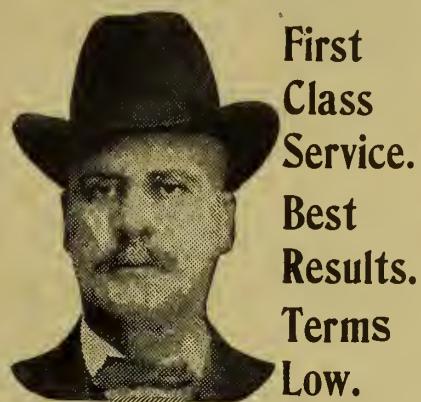
Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

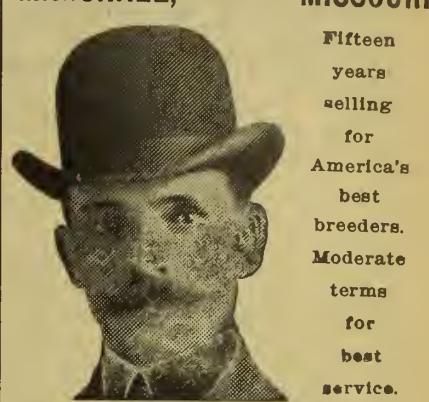
Bunceton, Mo.



First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer
MARSHALL, MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.

Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty.
All Herd Books. Catalogues compiled. Sale tent free.

\$25

Kansas City to Portland,
Tacoma, Seattle, Victoria,
Vancouver and hundreds
of Northwest points.

\$5 75

Cost of double berth from
Kansas City in Tourist
Sleeping Car leaving Union
Depot 9.50 a. m., 6.05 p. m. daily.

This economical combination
will be available any day from

February 15th to April 7th

Send me a postal to-day for particulars.

**Burlington
Route**

E. A. ABBOTT, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

1908

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homestead rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

The Southwest Limited

Was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts. If you doubt the first fact compare the service of today with that before the Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago via the

Chicago, Milwaukee & St. Paul Railway

will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p.m.: Grand Avenue 6.07 p.m. Arrives Union Station, Chicago, 8.20 a.m.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street
KANSAS CITY

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensation-*ni show stallions*"— "Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humble gaged" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "cash or hankable note gets away from Iams. Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

120—STALLIONS—120

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent tan stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "heat ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "18 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS'—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM
Breeder and Importer of PERCHERON HORSES, ABERDEEN-ANGUS CATTLE and POLAND-CHINA HOGS
E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS.
Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.
S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

..... by
H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA UNIVERSITY.

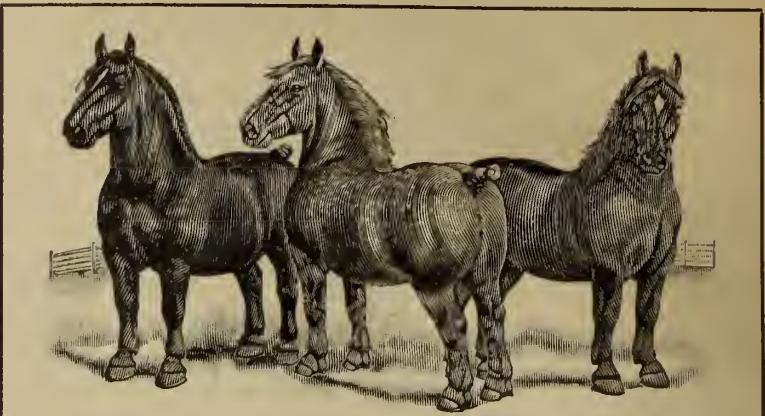
How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor, Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	FOR \$1.60
PEARSON'S MAGAZINE	
NATIONAL MAGAZINE	
AMERICAN BOY OR.....	
PHYSICAL CULTURE MAGAZINE.....	

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

THE EVENT OF THE SEASON AT KANSAS CITY

The Great Three-Days' Auction of

Aberdeen-Angus and Herefords

FROM THE HERDS OF LEADING BREEDERS AND EXHIBITORS

AT FINE STOCK SALE PAVILION, STOCK YARDS, KANSAS CITY, MO., TUESDAY, WEDNESDAY AND THURSDAY,

April 3, 4 and 5, 1906

Sixty Attractive Aberdeen-Angus will be sold on Tuesday, April 3d | Fifty-eight High-Class Herefords will be Auctioned Wednesday, April 4th

CONSIGNMENT BY

Jos. H. Rea & Son, Carrollton, Mo.	C. J. Williams, Harris, Mo.
R. S. Williams, Liberty, Mo.	S. P. Dewey, Ft. Madison, Iowa.
T. J. McCreary, Highland, Kans.	S. Melvin, Greenfield, Ill.
Berry Lucas, Hamilton, Mo.	Geo. H. Maize, Happy Valley, Mo.

Gudgell & Simpson, Independence, Mo.	J. A. Wilkerson, Kearney, Mo.
Scott & March, Belton, Mo.	J. C. Andras, Jr., Manchester, Ill.
Dr. James E. Logan, Kansas City, Mo.	B. H. Downing, Clark, Mo.
R. T. Thornton, Kansas City, Mo.	T. W. Carmichael, Odessa, Mo.
James A. Gibson, Odessa, Mo.	J. S. Lancaster & Sons, Liberty, Mo.
T. P. Whittenberg, Pleasant Hill, Mo.	James Paul, Patch Grove, Wis.

FIFTY HEREFORDS BEAUTIFULLY CONDITIONED AND OF GRAND SUBSTANCE, CONFORMATION AND BREEDING WILL BE SOLD ON THURSDAY, APRIL 5, BY DR. JAMES E. LOGAN, KANSAS CITY, MO.

They have been carefully selected from his noted SUNSET Herd and constitute a very choice offering

The Best Type, Character and Blood Lines are represented in these offerings by both sexes of these two breeds. For catalog address,

W. C. McGAVOCK, SALE MANAGER, - - SPRINGFIELD, ILLINOIS

COLS. R. E. EDMONSON, GEO. P. BELLOWES and R. L. HARRIMAN, Auctioneers

Mr. C. R. Thomas, Secretary of the American Hereford Breeders' Association, will also assist in the ring the day the Herefords are sold.

SHORTHORN EVENT EXTRAORDINARY At Fredonia, Kansas, April 13, 1906

...ALL GOOD ONES...

The Southeastern Kansas Improved Stock Breeders' Association have decided to make their annual Spring sale at Fredonia, Kansas, the most important event not only of their circuit but of Kansas for this year. We know that we **must** offer good cattle to have a **good** sale, and we are offering our best cattle—all good ones.

We know it will not do to try to make a few good ones sell a lot of culs, so we are offering absolutely all good ones. Tabulated pedigrees will show animals by the following great Scotch and Cruickshank bulls: Imported Collynie, imported Mariner, imported Choice Goods, imported Lord Cowslip, imported Tillycairn, Battle Axe, and Golden Victor, Jr., of Harris breeding; Scottish Emperor, of Bellows breeding; Kinellar, Captain Archer, and Aberdeen, of Hanna breeding. :: :: ::

: ABSOLUTELY NO CULS...

S. C. HANNA

Howard, Kans.

H. M. HILL

Lafontaine, Kans.

E. S. MEYERS

Chanute, Kans.

O. E. MORSE & SON and others

Mound City, Kans.

Apply for Catalogues to **H. E. BACHELDER**, Secretary, Fredonia, Kansas.

Auctioneers. COLS: BELLOWES, HARRIMAN and SHEETS.

DIAMOND CREEK STOCK FARM

Public Sale of

50 Head Standard Bred Horses

AT THE FARM ADJOINING

HERINGTON, KANS., MONDAY, MARCH 26, 1906

CONSISTING OF

Brood Mares, Young Stallions, Geldings and Fillies

Ranging from 1 to 3 years old...

Including some of the best stock ever sold in the State. Our leading stallion is Escobar, 2:13 3-4

SALE UNDER COVER. STOCK SHOWN AT ANY TIME PREVIOUS TO SALE

For Catalogue address . . . **J. W. CREECH, Proprietor,**
HERINGTON, KANSAS

Janes Stock Farm of Williard, Kansas



Will Hold a Public Sale of
34 Trotting-Bred Horses

at the State Fair Grounds, Topeka, Kansas

Tuesday, April 3, 1906

The offering includes the herd stallion General Evans 13166 with a record of 2.22 1/2 and one of his best sons. The offering comprises standard-bred mares and fillies mostly sired by General Evans.

The stock may be seen at the barns, Williard, Kans., 16 miles west of Topeka, until two weeks prior to date of sale when they will be shown at the Fair Grounds, Topeka, where the sale will be held.

For the catalogue and other information address

H. S. Janes, Herington, Kansas

Auctioneers—Cols. J. W. Sparks and C. M. Crews.

The Kansas Farmer...

The Greatest and Best Advertising Medium for
Reaching the Farmers of the Middle West, of

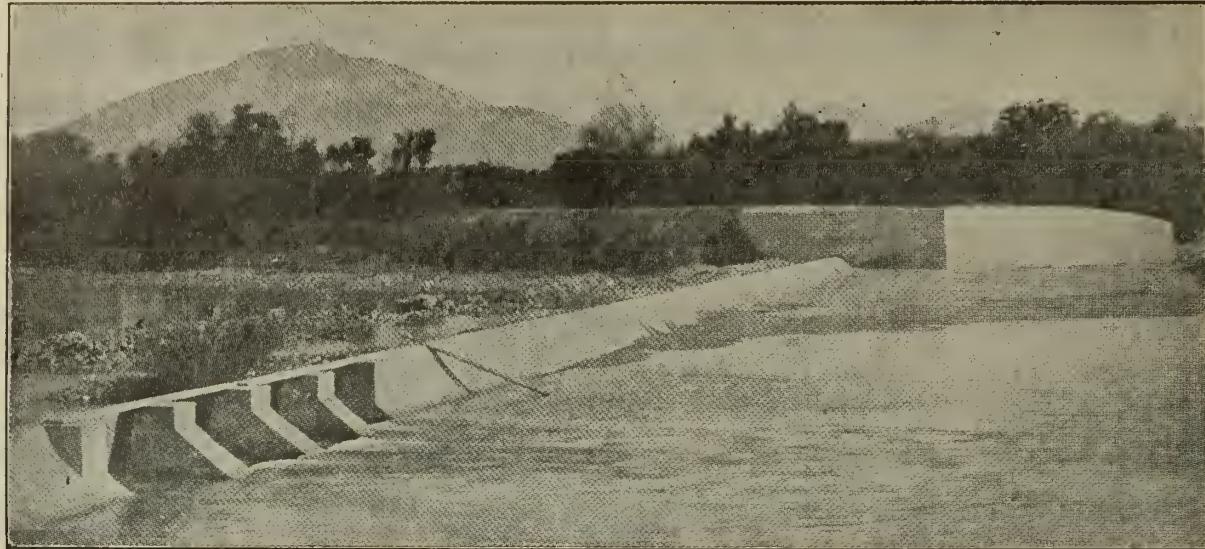
TOPEKA,

KANSAS

CALIFORNIA

—The Winterless Land of The West—

Where water
is cheaper
than rain.
The 350 foot
weir on King's
river where
our water
supply
comes from.



Over \$250,000
invested in
permanent
improvements.
Here is the
right kind of
irrigation Sys-
tem, good im-
provements,
low rates,
62 1/2 cents per
acre per year.

Concrete Weir, Fresno Canal and Irrigation Company, Kings River. Headwater of ditch system for Fresno Irrigated Farms Company. Weir three hundred feet wide, four feet high.

A Reasonable Estimate

To give the stranger a fair estimate of what it would cost him to buy a piece of unimproved land and to improve the same by planting vines, orchards and alfalfa, we present here a reasonable estimate at which the work can be contracted for to duplicate this estimated ranch and also complete the necessary buildings thereon:

40 acres good first quality land, with water right, at \$75 per acre, \$3,000; payment 50 per cent cash, balance 6 per cent net for 5 yrs., \$1500
10 acres vineyard; planting to grapes, labor \$15 per acre, cost of cuttings 50¢ to acre \$2 per M. 160
10 acres orchard; planting trees, etc.; labor \$15 per acre; 80 trees to acre at \$15 per 100, \$12; \$27
20 acres alfalfa, checking land for irrigation, seeding and planting, \$20 400
Truck garden, vegetable garden, berry patch and chicken yards can be put among the young trees or vines.

Building five-room modern cottage, parlor, dining-room, kitchen, two bedrooms and bath; hard finished and plastered; two coats paint; boiler, bath tub and sink; good plumbing. 1100
Building barn, with wagon and horse sheds on sides. 200
Boring well 60 feet deep, cased with 4-inch galvanized casing. 24
10-foot steel indmill, \$38 to \$40; 32-foot tower, \$27; 2000-gallon tank; \$30; say. 100
Chicken house material and fencing about house and barn. 146

Say \$4000.

These prices are figured with a margin at which the work could easily be contracted. If owner would put his own time into the work he could save considerable. We now have an investment of \$4000 cash and owe a mortgage of \$1500.

Cash. \$4000
6 per cent interest on \$1500 mortgage, \$90; 6 per cent interest on \$4000 cash of yours, \$240. 330
Water tax on 40 acres of land at 62 1/2¢ per acre. 25
County taxes, about. 30

The vineyard and orchard are now growing, but are non-productive. The 20 acres of alfalfa, however, has produced three cuttings of from four to five tons of alfalfa per acre for the year, worth \$7 per ton; 100 tons it \$7, \$700.

Should the settler go into the dairy business (by all means the most profitable) the 20 acres will support 20 cows; each cow will produce in butter-fat per year, \$60; 1 calf, fattened on skimmed milk, worth \$8; 2 hogs, fattened on alfalfa and skimmed milk, will weigh about 200 pounds each, sell for 5¢ per lb., \$20.

The profit from each cow will be \$88, or for the herd of 20 cows. \$1760

As you have had to feed all the hay we will deduct. 700

Profit. \$1060

Recapitulation:

End of first year—Original investment. \$4385

First payment of one-fifth mortgage paid off now. 300

Less income this year. \$4685

Expense for second year:

Care, plowing, etc., 20 acres vineyard and orchard, \$15 per acre. 300

6 per cent interest of \$1200 mortgage, \$72; 6 per cent interest on \$3,625, your investment, \$218. 290

Water and county taxes, same as last year. 55

\$4270

Your 20 acres will now produce five cuttings this year, average of 7 tons per acre, at \$7 per ton, \$980; or would support 30 cows at a profit of \$88 per cow.	\$2640
Less cost of feed.	980
This year's income.	1660
Second payment, one-fifth of mortgage.	300

\$2910

Expense of third year:	
Care of property, same as year before.	300
6 per cent interest on \$900 mortgage.	54
6 per cent interest of \$2910, your investment.	175
Water and county taxes, same.	55
Third payment, one-fifth mortgage.	300

\$3794

Less income third year, about the same.	1660
Your investment at end of third year is now.	\$2134

\$2134

Expense of fourth year:	
Care of property, same as year before.	300
6 per cent interest on \$600 mortgage.	36
6 per cent interest on \$2134, your investment.	128
Water and county taxes, same.	55
Fourth payment, one-fifth mortgage.	300

\$2953

Alfalfa returns, same as before.	1660
	\$1293

\$1293

This year the vineyard and orchard should produce a crop of an average of \$20 per acre, but this is a good deal of a matter of speculation and we will not figure it in the returns.

Expense fifth year:	
Care of property.	300
6 per cent interest on \$300 mortgage.	18
6 per cent interest on \$1293, your investment.	77
Water and county taxes, higher say now, on account of improvements.	75
Fifth and last payment on mortgage.	300

\$2063

Returns:	
Income, alfalfa and dairy.	\$1660
20 acres orchard and vineyard five years old, easily produce net \$50 per acre.	1000

\$2660

Less investment.	2063
Profit.	\$597

\$597

In these figures no mention has been made of the cash return that can be derived from poultry and garden truck or berries. Of course the prudent man will include these.

Your \$1500 mortgage paid off, your \$4000 original cash investment paid back, a profit in coin of \$597, and a fine home, orchard, vineyard, and dairy—40 acres—easily worth \$9000, as a result of five years' work.

Is it worth the effort? You can now plow up a portion of your alfalfa and plant more trees and vines, should you wish, and the five-year-old trees and vines will support you. But don't plow up all the alfalfa; that's the mainstay at all times.

Fresno Irrigated Farms Co.,

Main Office—511 Kohl Bldg., San Francisco, California

230 Pacific Electric Bldg., Los Angeles, California

1161 I Street, Fresno, California

630.5
KAF

ILLINOIS

KANSAS FARMER



Volume XLIV. Number 13

TOPEKA, KANSAS, MARCH 29, 1906

Established 1863. \$1 a Year

EXTRACT MAN AND WATCH DOG.

EDITOR KANSAS FARMER:—I had a large St. Bernard watch dog. He had never bitten anyone and was not called a cross dog. He never liked tramps or peddlers. He would never hurt them if they stopped when he went to them. I kept him for protection for the feminine portion of the family as they were alone quite often and we live just a half mile from the railroad track and tramps are always plentiful. One day an extract man came. The dog ran up to him, when he was just a few steps from the porch, but the man came on. The dog knew that there were no men at home and was not going to let him come in. He grabbed him by the arm and left the print of his teeth. He never lost any work on account of the attack. One day he came and made me three propositions. (1) Pay him \$50. (2) Arbitrate. (3) Kill the dog. If I would not do any one of these he would sue me. He claimed I should have had up a sign "Cross Dog" when the dog was known to be cross. Had he any right to make me do any one of these as long as the dog was in my yard? P. B. BALBY.

Sedgwick County.

Under the conditions stated by this correspondent the "extract man" has no legal right to make any demand on the owner of the dog or on anybody else on account of what the dog is reported to have done. The case is not legally different from several others that may be mentioned to make the situation clear. If the extract man had found our correspondent's bull at large in the yard, and, laying aside discretion, had disregarded the hoarse bellowing of the bull as he lowered his head and came at the extract man, took him upon his horns, and tossed him over the fence, would the extract man expect pay for his torn pants or broken arm as the case might have been? Again, if our correspondent's mule had been browsing between the gate and the house near the walk, and, on the approach of the extract man, had turned his business members toward the walk, and had exercised them just as the extract man passed, breaking the extract man's leg and disfiguring his countenance, would anybody suppose that the extract man had a legal right to have \$50 damages, an arbitration, or to demand that the valuable mule be killed?

Besides his general legal right as a dog to do anything in Kansas except to worry sheep, this dog was doing a service for which his owner had a legal right to keep him. Besides having a legal right to go everywhere else, he had a peculiar and especial right to be on guard at his owner's premises. The dog was there by legal right; the extract man by courtesy only. If our correspondent should feel disposed to fill his yard with cross dogs so that none might enter, he might be chargeable with courtesy towards the rest of mankind, but no law would prevent.

The right to guard ones domicile is well illustrated by a case that is just now occupying a good deal of public attention. John D. Rockefeller, the head of the oil trust, is wanted as a witness in some matters that are under investigation in court. He remains in his home, has it guarded, and admits no one who could be suspected of being a server of subpoenas. Up to this time he has thwarted all efforts

of the officers to see him. "His house is his castle," etc., and "the king, unbidden, may not enter."

Such is the legal aspect of the case. The extract man is not likely to sue. But, treat him kindly, buy a year's supply of extracts from him, and, if they are good extracts, speak of their excellence to the neighbors, but so long as the dog is needed keep him on guard.

A NEW GRASS.

The new Teneriffe Canary grass seems to be attracting a great deal of attention throughout the country, and believing that our subscribers would be interested in testing this new candidate for public favor, we have made arrangements with the introducers to

York City, telling what you want to build and asking for a copy of the above named book.

For our correspondent's purpose, a concrete made of 1 part Portland cement, $2\frac{1}{2}$ parts clean sand and 5 parts broken stone will be found satisfactory. Or a very good wall may be made by using 1 part Portland cement and $3\frac{1}{2}$ or 4 parts clean sand.

On a tight platform, or in a mixing-box, scatter the cement over the sand; shovel the materials to one end and then to the other until thoroughly mixed as will be shown by the uniform color of the mixture. If broken stone be used, wet the stone thoroughly, throw it on top of the cement and sand mixture and turn it at least three times with the shovel. At the second

can be brought to full height at one operation.

A usual mistake with beginners is to underestimate the pressure of the concrete upon the forms, with the result that these often give way. This is especially liable to happen when the materials are tamped.

THE HUSBAND'S INHERITANCE.

EDITOR KANSAS FARMER:—Question 1. Please tell us through the next issue of your paper, when the law took effect in Kansas, making a husband heir to one-half of his wife's property at her death, if he survives her.

Question II. If a widow, who has property, marries again and still keeps that property in her name and has no children by this second husband, can this man come in as an heir to this property? If so, to what extent?

A KANSAS FARMER READER.
Greenwood County.

Section 5 of Chapter 63, Acts of 1859, provides that after payment of debts, one-half in value of all the real estate, of the husband, shall at his death be inherited by his wife, if she survives him.

Section 29 of said chapter says: "All the provisions hereinbefore made, in relation to the widow of a deceased husband, shall be applicable to the husband of a deceased wife. Each is entitled to the same rights or portion in the estate of the other, and like interests shall in the same manner descend to their respective heirs.

These provisions of Sections 5 and 29 of the Act of 1859 were embodied in Sections 8 and 28 of the Act of October 31, 1868. The Act of 1868 is still in force.

The second question is substantially answered in a decision of the Kansas Supreme Court, 52 K. 392.

"An intestate, who was three times married, by his first wife had one child, by his second wife one child, by his third wife, surviving him, he had five children. At his death one-half in value of his real estate, not necessary for the payment of his debts, descended in fee simple to his widow, and the other half to his seven children equally. Upon the death of the widow, his estate descended to his own children."

In case there are no children and no will, the survivor, whether husband or wife, inherits all the property not necessary for the payment of debts. In any case the survivor in Kansas inherits half.

RECIPROCITY—RAILROAD QUESTIONS.

In a letter to the Editor dated at his "Hill Crest Alfalfa and Feeding Farm," Bon. Thor. M. Potter says:

"I have read with much interest your reprints on the tariff reform along the lines of the American Reciprocal Tariff League. I wish you would impress upon your readers the importance of the Republican party recognizing the great agricultural interest of the West by placing a plank in its platform favoring reciprocity, and another plank recommending abolition of the pass, and providing for passenger service at two cents a mile; also providing for a commission whose decisions should be final and immediately effective until reversed by the courts if upon review the rate fixed were found to be confiscatory."

THE KANSAS FARMER has no desire



GENERAL EVANS 13166

Head stallion Jones Stock Farm included in sale at Fair Grounds Topeka, April 3, 1906.

send a small sample of the seed free to any of our readers who desire it. A postal card request addressed to the Iowa Seed Co., Des Moines, Iowa, is sufficient, providing you mention this paper, and they will also send directions for culture and a copy of their large illustrated seed catalogue. It is claimed that Teneriffe Canary grass has produced over \$60.00 worth of seed per acre besides an excellent hay crop, and we believe that it will pay all farmers to give it a trial.

CONCRETE WALL FOR CELLAR.

EDITOR KANSAS FARMER:—I want to build a cellar, 9x12x7, with walls 8 inches thick. Please inform me how to mix concrete and apply for best results. I would like to build 3 feet and raise my box. Will it stand or shall I make a box the full height? Please answer through the KANSAS FARMER.

Miami County. J. M. EDWARDS.

Every person who intends to build concrete work of any kind should secure a copy of "Concrete Construction about the Home and on the Farm." Write a postal card to the Atlas Portland Cement Co., 80 Broad street, New

turning add water enough to give the mixture a mushy consistency. This mixture is to be shoveled immediately into the forms for the wall, and well tamped. If the broken stone be omitted, the cement and sand can be made into a soft mortar by using the right amount of water. It will then scarcely need to be tamped, but should be pushed down next to the forms with a puddle.

The "form" or box should in all cases be in readiness before the materials are mixed. The form is preferably made of green lumber. It is well to give the boards a coat of crude oil on the side that will come in contact with the concrete. This prevents the materials from sticking to the boards. If, however, it is proposed to plaster the wall, the oil must be omitted. In this case, wet the boards.

The form may be made 3 feet or $3\frac{1}{2}$ feet high, filled to that height, left over night, raised the next day and the work continued. It is also quite possible to build the wall on only one side or two sides at a time. In this way less material will be required for the "form." Or, the one side or two sides

to enter partisan politics. It is willing, however, to say that Mr. Potter's suggestions are a reminder of the little-used doctrine that the farmer is entitled to consideration in arranging tariff schedules. Doubtless it is now time for a farmers' inning in tariff legislation. The great reciprocity convention, which resulted in the formation of the American Reciprocal Tariff League, made it plain that the protective-tariff policy is conceded to be permanently established. Even ex-Senator Harris of Kansas accepted this doctrine on the floor of the convention. But to be fair, this protective tariff should protect markets for the farmer as well as for the manufacturer. To secure such protection for the farmer is the object of the league. Every voter should see that his interests in a "square deal" are duly impressed upon the political organization to which he belongs.

This is a time of breaking away from bosses and all dictation in matters political. The voter need no longer fear for the consequences of acting according to the dictates of his conscience regardless of what the so-called "business interests" of the East, or anywhere else, may say.

But it is not so much political fear as it is political apathy that causes the farmer to neglect his interests in a political way. Whenever the time shall come that four-fifths of the farmer voters shall attend the primaries, and shall take active parts in their proceedings, evincing a proper understanding of measures as affecting their interests, it will be found that politicians, whether in office or wanting to get in, will be very careful for farmers' views.

The extent and influence of the pass evil is little realized. The time is coming when a person holding public office will be as much disgraced if found holding and using a railroad pass, as if found accepting a bribe of any other kind. The question of extending favors of the Inter-State Commerce Commission is now the "unfinished business" in the U. S. Senate. The bill passed the House by a very large majority. It has the powerful endorsement of President Roosevelt. It is conceded by all that no other president ever has had so much influence as he. Doubtless some extension of the powers of the commission will be made. The matter has passed beyond the realm of newspaper discussion. Those who wish now to promote any view of the matter should write to Senator C. I. Long, Washington, D. C. expressing their views and presenting their arguments.

Reports indicate that the convention to be held at St. Louis on April 16 and 17 under the auspices of the Southwest Promotion club is to be a great gathering. Those wanting detailed information should write to Hon. Nathan Frank, chairman of the executive committee.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address: The Kansas Farmer Company, Topeka, Kans.

Miscellany

Observations.

EDITOR KANSAS FARMER:—Here are a few observations on articles from the issues of March 8 and 15 of THE KANSAS FARMER.

In the issue of March 8 in the article "Among Some Flowers of Easy Culture," by Jeanette Brown, I should have included zinnias in the collection. They are very hardy and tough, very free flowering, and make a fine blaze of different colors. The flowers grow both single and double in size and bloom from early summer until the severe frosts in the fall.

Pocket gophers are easily trapped, and without any bait. Open the runway at the newest made mound and put in

a trap. Cover over the trap, but leave a small hole open for light beyond the trap. The gopher comes to investigate, walks over or into the trap, and is caught.

Farmers on rural routes would find the parcels post of great convenience in many ways. Hurry it along.

In my opinion, based on my father's knowledge with my own little experience, Chas. H. Jackson is correct in his statements in regard to the warbles and ox bot fly. I have watched the big blue-black fellow many times. I have seen the cattle run with their tails held out and up in a peculiar fashion, it being claimed that the tail was held up for a bait for the fly to strike at instead of their backs. The fly strikes the back and lays the eggs under the hide. During the winter and spring a person can feel them and very often squeeze out the most forward ones. These flies will create a miniature stampede among cattle by buzzing near them.

ED. A. LORD.
Kingman County.

Select Seed-Corn Now.

F. B. Mumford of the Missouri Agricultural College calls attention to the fact that farmers might with greater profit select seed-corn before spring work begins. Numerous investigations, he says, have shown that in the average year, a Missouri corn-field has 75 per cent of a stand. That is to say, the Missouri farmer will plant and cultivate 106 acres of corn and harvest 75. The cause of this is poor seed. He offers this simple method of testing seed-corn: Put several old newspapers in the bottom of a box and wet them. Then spread a white cloth with checkerboard squares on top of the paper, each square being numbered. Now number the ears to correspond with the squares. Take three grains from each ear and place them on the cloth in the square bearing the same number as the ear. Put another cloth on top of the grains and place the box in a warm place. In four or five days they will have sprouted. Now start with ear 1. If all three of the grains from that ear have sprouted vigorously, it will do for seed, but if the grains fail to germinate or show weak and spindly sprouts, throw the ear aside, and so on for every ear. In this way, almost a perfect stand can be secured which means a much larger yield per acre.

A Long-Distance Concert.

Imaginative writers have pictured wonderful possibilities of the telephone. Serious people have deemed it a waste of time to read of the things forecasted to result from the use of the lines connecting the little instruments now found in so many farmhouses. That some of the wildest dreams are being realized is evidenced in the following from a correspondent of the American Telephone Journal of Feb. 10.

"Some time ago the author participated in a musical performance given by two players separated by many miles, with the audience located at yet a third distant point. The author, provided with a hand-receiver connected to the telephone circuit and standing before a large horn attached to the transmitter, played on a French horn for the benefit of listeners in the office of the Spokesman-Review, at Spokane, Wash., 726 miles from Salt Lake City, in which place he was located.

"The remarkable feature of the performance was that the piano accompaniment was played by a music dealer named Reeves at his store in Helena, Mont., 525 miles away. A transmitter, equipped with a megaphone, was mounted on top of the piano and this player also wore a head-receiver.

"In playing the Miserere, from Ill Trovatore, for instance, your correspondent waiting in Salt Lake City, could hear Mr. Reeves play the introduction, and then being well acquainted with the score, knew just when to begin the melody. Then at the close of the strain, he would listen until the intermezzo had been played on the piano up at Helena, and then begin again. There was not the slightest jar between horn and piano during the entire program, and people listening along the line thought both instruments were being played in the same room. Your correspondent screened the adjutant's office at Fort D. A. Russell and the offices of the Cheyenne newspaper 500 miles distant, and one night was gotten out of bed at 11 o'clock to serenade numerous central offices of the company scattered through the southern part of Utah. General Manager Murry was much interested in these experiments, and afforded every facility for their conduct. When satisfactory con-

nnections are made with the Pacific Coast, an effort will be made to serenade the newspaper offices of several coast cities from Salt Lake. It is believed that the experiment could be carried on with success with Omaha, and even points east of that city.

"An attempt was made by the telephone engineers to locate transmitters in front of the great organ in the Salt Lake Tabernacle, and reproduce organ recitals at points along the system, but the Mormon Church authorities were not favorable to this, and the experiments were cut short before they had been perfected."

Educating Young Farmers.

EDITOR KANSAS FARMER:—Within the last ten years nothing has been so marked in the educational world as the many efforts being made for the education of the farmers of the West. The attendance at the Agricultural Colleges has greatly increased, the legislative appropriations have been more and more liberal, and the strictly agricultural, stock, and horticultural courses have easily taken the highest and most popular rank in these colleges.

The farmers' institute work has taken on new importance and popularity. In Kansas this year more than one hundred farmers' institutes have been held since last September with an aggregate attendance of nearly twenty thousand farmers. Not only did the Agricultural College assist in these institutes, but it sent a corps of its workers in a special train, through the courtesy and liberality and far-sightedness of the Rock Island railroad officials, over the entire lines of that road in Kansas, reaching at least ten thousand farmers in that way.

THE SHORT COURSES.

Until a few years ago no special effort was made to reach young people who could not enter college for a full year and for the regular course. Now this institution is offering twelve-weeks' courses in farming, dairying, animal husbandry and in domestic science. Possibly a brief outline of work just ending will interest the farmers of Kansas, especially the young people. These courses are open to persons eighteen years of age and over. No maximum limit is made and men have been taking this course who are fifty years old—experienced farmers, men who come for this work and bring grown sons and daughters with them. The work is made intensely practical, not technical, largely made up of lectures and laboratory work. About one hundred and fifty men have been taking these courses, a fine body of earnest, sensible people who have done an enormous amount of work in a short time.

THE FARMERS' COURSE.

Naturally the largest group of students is found in this course which includes crop production, feeds and feeding, breeds of live stock, stock judging, and carpentry the first year, and farm management, diseases of farm animals, grain judging and farm blacksmithing the second year.

Crop production includes a discussion of the different soils, different crops, soil moisture, tillage, cultivation of crops, soil fertility, corn and wheat judging, methods of planting and seeding, etc. Farm management has included lectures on division of fields, rotation of crops, methods of restoring fertility, handling farm machinery, plows, cultivators, mowers, and all farm tools, laying out of farms, plans for farm buildings, farm accounts, drainage, etc.

Animal husbandry has had two courses, one on breeds of stock which has consisted of about fifty lectures on the various breeds of cattle, horses, hogs and sheep, with actual daily drill in the barns in judging the stock that day under discussion. These boys had the opportunity of attending a great Percheron horse sale held at the college barns. Another course of great interest taken by about 100 men was that of stock feeding. This consisted of a series of lectures on feeding beef cattle, hogs, sheep, and dairy cows, with opportunity to keep in touch with the experiments now being conducted here.

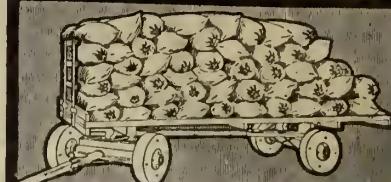
THE DAIRY COURSES.

These have attracted a great many young farmers who are already successful dairymen as well as many who simply want to make dairying a more important factor of farm business. The regular dairy course has had fifty-five students and their work has been exceedingly practical, handling separators, testing milk and cream, making butter and cheese and ice cream, with lectures on dairying, feed for dairy cows, diseases of dairy cows, etc. The college has a well-equipped

A BIG HAUL

It easier on the team and on the man with a Farmers Handy Wagon than a half load with the ordinary high-wheel wagon. It rolls over the softest ground without cutting in. Loads in half the time with half the labor. You'll never know what a real handy wagon is until you've used the handiest wagon on earth.

THE FARMERS HANDY WAGON



The Farmers Handy Wagon is the invention of a farmer, and it meets all the conditions he aimed to fulfill. It saves time, saves labor, saves money every day on the farm. Sold by dealers. Write for catalog that describes and illustrates the many uses a Handy Wagon can be put to—it's an interesting book and it's free.

The Farmers Handy Wagon Co.

Saginaw, Mich.

Branches: Kansas City and Des Moines. Makers of the Handy Hay and Stock Rack and Handy All Steel Frame Silos. Catalogue free.

MADE IN SAGINAW

creamery plant with the best of machinery for the making of butter and cheese, with 35 dairy cows, and this department now has fifty-two farmer customers who bring in separated cream. This gives the students the practical experience so very desirable, fitting them for handling a regular dairy, for making farm dairying more profitable, or for handling a creamery and making butter, or for taking charge of a cheese factory.

It is interesting to talk with these young men, to see them in recitation and to feel that this short course will be an inspiration for better farming, for better living, for a higher standard of citizenship. This winter the writer has met a great many farmer "short course" students and they are always alert and ready and it is very evident that their neighbors are watching them, realizing that they have learned something even in the "short course." A very remarkable thing, too, is that these one hundred and fifty young men came to the college in one day, dropped into the ways of the school at once, and have been treated just as well by everybody as if they had been university seniors. Verily the farmer's work is taking on a new dignity in these recent years.

Manhattan, Kans.

MILLER.

Table of Contents

Alcohol, Denaturized for farm purposes.	340
Australian salt-bush.	339
Alfalfa on sod.	341
Beef-production, Western feeds for.	343
Birds in regard to fruit and insects, remarks about.	346
Business interests, concentration of, brings buyers.	343
Chicken enemies, two.	357
Concrete wall for cellar.	337
Corn-growing contest, last word on the boys'.	340
Cows, balanced rations for.	358
Dry-weather crops in the West.	339
Extract man and watchdog.	337
Farmers, educating young.	338
Farm management.	339
Farm notes.	341
Feeding questions.	342
Grange in Anderson Co. the.	352
Grass, a new.	337
Home orchard, the.	354
Homes, how may we enhance the comforts and attractions of our.	352
Husband's inheritance, the.	337
Intelligent dog, an.	349
International Sunday-school lesson.	350
Long-distance concert, a.	338
Manhattan grange.	352
Manly, be.	350
Mites and hawks.	357
Moral victory, won a.	357
Mothers' Day.	351
Mud pies (poem).	350
Observations.	338
Parrot, a wonderful.	349
Poland-China breeders, to.	342
Poultry, thoroughbred.	357
Price of the surplus is the price of the whole crop, the.	341
Reciprocity—railroad questions.	337
Right one, the.	348
Spring Hill grange.	352
Seed-corn, directions for testing the vitality of the.	339
Seed-corn, select now.	338
Shade trees for the home.	355
Sows, caring for.	342
Start, how shall I.	356
Story, a "truly".	350
Summer fallow vs. plant corn.	339
Trade of the United States with Europe.	347
Twenty years ago (poem).	348
Two graces, the (poem).	349
Veterinary department.	359
West Side Study Club.	351
Winter dairy, managing a.	358

Agriculture

Summer-Fallow vs. Plant to Corn.

I have a nice level field consisting of 135 acres. This field has been in cultivation for twenty years, with the exception of about 15 acres of new ground two years old. This ground has had corn on it for the past two years and last year made about 15 bushels to the acre, with the exception of the new ground which made 38 bushels per acre. I thought I would plow this land in April or May and disk and harrow for wheat. The ground has a very heavy crop of stalks and crab-grass and I thought plowing this under would greatly benefit the soil. Which do you think would be advisable, to summer-fallow or plant to corn?

FRED HUMPHREY,

Barber County.

I would recommend summer-fallowing the old land in preference to cropping it with corn as a preparation for sowing this land to wheat in the fall. A fifteen-bushel crop of corn will hardly pay for the growing, and on soil which is deficient in fertility, as this appears to be, especially in your part of the State where the rainfall may not be over abundant, you can doubtless put the land into better condition for growing a good crop of wheat next season by summer-fallowing than by cropping during the present season.

In order to develop the fertility of the soil and conserve the soil-moisture, you should practice summer culture in summer-fallowing this land, that is, cultivate the field occasionally after plowing, in order to destroy weeds and keep the surface mulch of mellow soil. This land is doubtless somewhat exhausted of humus and is becoming deficient in fertility, and in order to give the land the most benefit I would recommend not to plow early this spring, but to disk the land and sow some early grain crop, as barley or oats, and plow this under for green manure some time in June before the grain has made too rank a growth. Cultivate occasionally during the balance of the summer as described above. This will not only conserve the soil-moisture and develop the fertility of the soil, but will hasten the decay of the green matter and produce a firm, well-settled seed-bed for fall seedling of wheat. Plowing under the stalks and crab-grass will add some humus to the soil, and in case you do not crop this season, it will be much preferable to plow under this material rather than to remove it or burn it on the ground. But doubtless you can prepare a seed-bed for barley or oats by disk and harrowing as I have described, and later plow under not only the stalks and crab-grass, but the green crop which has been produced; but do not let the growth get so rank and mature that it will not readily decay when plowed under. The object should be to get the soil well settled and firmed before sowing to wheat.

A. M. TENEYCK.

Australian Salt-Bush.

Can you tell me anything about Australian salt-bush, a plant supposed to be something like alfalfa, and suited for dry climates? Also advise where the seed may be had, price per bushel, and amount of seed necessary to sow per acre.

SAM. M. DEAN.

Morton County.

The Australian salt-bush (*Atriplex semibaccata*), is not botanically related to alfalfa. It is, however, a forage plant which grows very successfully in alkali soils, producing abundantly where it is adapted for growing, making a fodder of high feeding value, and comparing favorably with alfalfa and clover in this respect.

We have not experimented with the crop to any extent at this station. It appears to be grown most successfully in California and some of the Rocky Mountain States. There are a number of varieties of salt-bush, which seem to vary in composition, production, and in their adaptation for growing under different climatic and soil conditions. You may secure seed of Australian salt-bush from the large seedsmen. The price is \$1.50 per pound, as published in their catalogues. One pound of seed is sufficient to plant an acre. The seed should be mixed with ten to twenty times its weight of ashes or ground grain so as to facilitate its distribution. It may be sown with the grain-drill, or better with the grass-seeder attachment to the grain-drill. The seed-bed should be carefully prepared and the seed should not be covered more than a half inch or so. Probably we should not sow too early in Kansas, but wait until the ground is warm taking care to prepare the seed-bed early, cultivating it at intervals in order to conserve the soil-moisture, and put the soil into good condition for germinating the seed. At this station we have usually failed to get the seed to germinate.

You may secure Farmers' Bulletin No. 108, on this subject, by writing to the United States Department of Agriculture, Washington, D. C. The California Experiment Station has also published a bulletin, No. 125 on Australian salt-bushes. A copy of this bulletin may be secured by writing to E. W. Hilgard, Director of the Experiment Station, Berkley, California.

A. M. TENEYCK.

Farm Management.

Will you kindly advise me through the KANSAS FARMER how to manage my 80 acre farm? I have a good, average upland farm 6½ miles from Ottawa. I have hardly made my expenses since I have owned the place. I have 5 acres in alfalfa, sowed last fall. I am going to sow 10 acres to oats, plant 36 acres to corn, and have 20 acres of prairie-hay meadow.

ANDREW BRADY.

Franklin County.

On a small farm, such as you describe, it is almost necessary to engage in some specialty in farming in order to make more than a bare living. As to what this specialty should be depends largely upon the farmer, as well as upon the soil and the location. In your section of the State and situated near so large a town as Ottawa, you could engage in the breeding of some kind of pure-bred live stock, such as hogs, sheep, or cattle, or you could make a specialty in some line or lines of crop-breeding; for instance, raise pure-bred seed-corn. There is a great demand today for better-bred seed-corn and better-bred seed of all kinds of crops.

If you want to learn how to succeed in special lines of farming, I advise you to come to Manhattan and take our short course in Agriculture which begins January 1 each winter, lasting twelve weeks. If you can not do this, determine on some special line of farming which you would like and secure all the information you can in the way of bulletins, books, and literature,

it grows successfully, than may be secured from Indian corn.

Certain varieties of millet, as the hog or broom-corn type or variety, succeed well in Western Kansas. I should also recommend for trial in your part of the country cow-peas, a most excellent forage crop, and where the crop grows successfully, yields of two or three tons of good hay may be secured per acre. The hay is similar to alfalfa hay in feeding value. Cow-peas not only make a valuable crop for forage, but are excellent to use in rotation with other crops, acting as a soil-fertilizer, since the plant is a legume. By means of the bacteria which grow on the roots of the plants, the nitrogen-content in the crop is largely taken from the air and the supply of nitrogen in the soil may be actually increased by the growing of a crop of cow-peas.

A. M. TENEYCK.

and make a study of the business before engaging in it. Meanwhile you can grow larger crops of corn, grain and alfalfa by thorough tillage of the soil, proper cultivation of the crop, and by the application of fertilizers especially barnyard manure, which you can doubtless secure from Ottawa during the winter season for the hauling. Six miles and a half is a long distance to haul manure, and yet, if you had nothing else to do, it might be well to haul manure during a part of the winter season when the roads are good. Eight or ten tons of good manure spread over an acre of your upland soil, if it is like the average upland soil of the State, would give an increase of 10 to 15 bushels per acre in the yield of corn for the first, second and third season after the manuring.

I have mailed a copy of my notes on crop rotation, which may give you some suggestions. Also, I am preparing a bulletin on "Farm Management" which will probably be published some time during the summer or early fall. You may secure the bulletins of this Experiment Station free by sending your name and address to Professor J. T. Willard, Director.

A. M. TENEYCK.

Directions for Testing the Vitality of Seed-Corn.

A. T. WIANCKO, AGRICULTURIST, PURDUE UNIVERSITY AGRICULTURAL EXPERIMENT STATION.

No farmer can afford to neglect making sure that every ear of corn he uses for seed will produce strong vigorous plants. The difference between none and two or three weak ears per bushel of seed-corn, may amount to hundreds of bushels in the resulting crop. The cost of producing an acre of corn is practically the same whether the stand of plants is good or poor, so why not have the good stand and the larger crop?

To make the germination test, proceed as follows:

1. Make a shallow tray or box about two feet by three feet in size and two inches deep inside. Bore small holes, one and three-quarter inches apart, in the sides and ends about half an inch from the top. Through these holes string light copper or galvanized wire both ways, thus marking the tray off into squares—a square for the kernels of each ear of corn to be tested. A stout string may be used instead of the wire but it will last only one season. Instead of weaving in the cross-wires, a piece of large-meshed, wire chicken fencing may be nailed on top of the tray, with a half-inch strip all around the edges on top of the wire so that when the tray is covered the cover will not rest on the wire. This is the "tester."

2. Fill the tester up to the wires with earth or sand and thoroughly wet it.

3. Take the tester to where your seed-corn is stored, or take both tester and the selected seed-corn to a place where you can work conveniently.

4. Take the first ear of corn and remove five kernels, each from a different part of the ear, and put them on the first square in the upper left-hand corner of the tester and press them down into the earth. Lay the ear on a shelf or table. Then take the next ear and proceed in the same way, putting the kernels in the square to the right of the first and the ear in the corresponding position beside the first ear on the shelf. Continue this until the first row of squares is filled, then turn and come back on the next row below. The ears corresponding to the second row of squares may be laid in a row on top of the first row on the shelf. Whatever the system followed, the ears must be so arranged that the ear belonging to the kernels in a certain square in the tester may be easily located.

5. After the kernels are all placed and well pressed into the wet soil, carry the tester into a room where the temperature can be kept around 70 degrees. The ordinary living-room will be about right, but the tester should not be put near the stove.

6. Cover the tester with panes of glass, resting lightly on the sides so as to let in a little air. Glass makes the best cover because it prevents drying out and at the same time permits one to see how the corn is getting along without lifting the cover.

7. After four or five days take off the cover, carry the tester to where the corn is stored and then examine the kernels in each square. If any lot of kernels shows dead germs or weak sprouts, throw away the ear from which they came. [Send to the stock editor.] Never use an ear which does not show at least four strong roots and stem sprouts out of five kernels tested.

The tester may be made of any size

THE SIGN OF THE FISH



has stood for the BEST during seventy years of increasing sales.

Remember this when you want waterproof oiled coats, suits, hats, or horse goods for all kinds of wet work.

WE GUARANTEE EVERY GARMENT. 415

A. J. TOWER CO., BOSTON, MASS., U. S. A.
TOWER CANADIAN CO., LIMITED TORONTO, CAN.

Wire Fence 29c

48-in. stock fence per rod only
Best high carbon coiled steel spring wire
Catalogue, tools and supplies FREE
Buy direct at wholesale. Write today.
MASON FENCE CO., Box 62, Leesburg, O.

FENCE STRONGEST MADE

Bull-strong chick-en-tight. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalogue Free. COILED SPRING FENCE CO., Winchester, Indiana.

LAWN FENCE

Made of Steel. Lasts a life-time. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free. KITSELMAN BROTHERS, Box 399, Muncie, Indiana.

The Best of Prophets

"of the future is the past." The first Page Fences built have been in use 20 years and are still good fences. We make better fences now than ever before. Use stronger wire, heavier cross-bars, thicker galvanizing. Write. PAGE WOVEN WIRE FENCE CO., Box 7856, Adrian, Mich.

IWAN'S POST HOLE AUGER

Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Three times the work accomplished with an IWAN Auger than any other. Makes hole smoothly and quickly, easily, every day. Used by U. S. Gov't. 8, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 and 42 inches. Special price to introduce. Agents Wanted. Inquire of dealers or write direct for particulars. IWAN BROS., Dept. Nol, Streator, Ill.

\$10.00 Sweep Feed | \$14.00 Galvanized Grinder

We manufacture all sizes and styles. It will pay you to inquire for price lists.

CURRIE WIND MILL CO., Toska, Kansas

CEMENT FENCE POST or Building Blocks

CROUCH \$10 MACHINE

Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free. Ellsworth Crouch, Oakland, Kansas.

I have run 56 bales in 60 minutes weighing 70 pounds. J. M. Foster, Silver Lake, Kans.

The parties running the two presses at Vera, L. T., say that two men can accomplish more with your press than three can with any other. F. W. Taylor & Co., Kansas City, Mo.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1084 Jefferson St., Topeka, Kansas.

EUREKA BOILER or STEAM FEED COOKER

Saves half your corn or other feed. Saves labor in feeding. It will steam moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information.

John Deere Plow Co., Denver, Kansas City, Mo.

Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

\$16.00 AN ACRE in Western Canada



is the amount many farmers will realize from their wheat crop this year.

25 Bushels to the Acre
will be the
Average Yield of Wheat

The land that this was grown on cost many of the farmers absolutely nothing, while those who wish to add to the 160 acres the Government grants, can buy land adjoining at from \$6 to \$10 an acre.

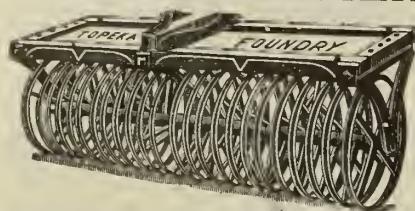
Climate splendid, schools and churches convenient, railways close at hand, taxes low.

Send for pamphlet "20th Century Canada" and full particulars regarding rate, etc., to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent.

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.



DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

A Buggy Bargain



Buy it on a Plan so You Know You Have a Bargain

WE PAY THE FREIGHT.

You deal with the factory. 30 Days Trial. You can test its quality for yourself and see that its price is about half the local dealers' price.

GUARANTEED TWO YEARS

We insure you against any loss if a flaw develops in either workmanship or material within that time. Do you want a vehicle of that kind sold that way? Anything you need in vehicle line on just that plan. Send today for manufacturers' catalog. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

Before you buy that Manure Spreader

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader
has all these important features and many others equally as important. Write to-day for free catalogue and special prices and terms.

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

convenient. The one described above will test about three bushels of ear-corn at a time, or every five days.

Denaturized Alcohol for Farm Purposes.

The object of this article is not to augment the consumption of alcohol as a beverage, but to find channels other than a digestive one, for its employment. Alcohol in its abuses constitutes a danger of mankind, but it has been proved that it can rival gas, acetylene and electricity for lighting and domestic uses. That which causes disorder of the stomach of man, agrees perfectly well with the internal organism of stoves, lamps and motors. Ethyl alcohol, which forms the basis of all fermented liquors, is the oldest and best-known of the whole group of alcohols, and is generally designated by the simple name, alcohol. It may be produced in various ways. Science enables us to employ an inexhaustible series of products of the soil, and has created a new source of riches for the agriculturist.

MATERIALS FROM WHICH ALCOHOL IS MADE

The materials used in the production of alcohol are of two classes—those containing starch and those containing sugar. In the first class are included potatoes, corn, rice, barley, oats, rye, and wheat. In the second class are sugar-beets and molasses from sugar-beets and cane sugar. The potato has been used for the manufacture of alcohol since the eighteenth century, and in many parts of Europe it constitutes the most important raw material for its production. Experiments to produce vigorous potatoes from seed and secure a high percentage of starch, which is of the greatest importance for the manufacture of alcohol, have met with very good success. Diseased potatoes, except when attacked by dry rot, can be advantageously utilized for the manufacture of alcohol because the chemical changes produced by the disease extend more to the skin and less to the starch.

Corn is extensively used for distilling purposes in the United States, Hungary, and Italy. It contains 60 to 75 per cent of starch, and in addition about 11.5 per cent of sugar, and 4.8 per cent dextrin. By breeding and selection, the amount of starch in corn can be largely increased, thus making it an ideal cereal for the manufacture of alcohol for industrial purposes.

Barley, rye, oats, wheat, and rice contain from 42 to 78 per cent of starch, which, when the price will permit their use, are valuable materials for the manufacture of alcohol.

In the manufacture of alcohol from sugar-beets, the yield depends solely on the percentage of sugar. The selection of the best beets for distilling purposes is not of importance, and beets which can not be advantageously worked for sugar may be practicably utilized for alcohol.

Molasses, which remains as a residue in the manufacture of sugar, is utilized for the manufacture of alcohol. The percentage of sugar in molasses is about 50 per cent.

Of the raw materials containing sugar, which can be utilized in the manufacture of alcohol, are Jerusalem artichoke, the gigantic carrot, chicory, sorghum-stalks and corn-stalks.

HOW ALCOHOL IS DENATURIZED.

The denaturization of alcohol is accomplished by mixing with the alcohol a small proportion of repugnant ingredients, which, while not injuring its efficiency for technical uses, render it unfit for consumption as a beverage. The denaturizing substances employed depend upon the use to which the alcohol is to be subsequently applied. They include pyradin, picolin, benzine, wood vinegar, wood alcohol, gasoline, and acetone oil (derived from the grease of the wool of sheep), as well as other similar products.

ALCOHOL IN GERMANY.

For several reasons the subject of the technical use of alcohol has reached in Germany an advanced stage of development, which if followed by the United States will mean a great change in our agricultural and industrial development. Germany has no natural gas wells nor native petroleum supply. When some years ago the question of adopting motor carriages for military purposes was under discussion, it was remarked by the officials of the War Department that kerosene and gasoline engines could be operated only with one or the other of the products of petroleum, which is not found in Germany and the supply of which may in case of war be wholly cut off. But the broad, sandy plains of Northern and Central Germany produce in ordinary years cheap and abundant crops of potatoes, from which is easily manufactured by

processes so simple as to be within the reach of every farmer, a vast quantity of raw alcohol. Under these conditions "spiritus," as it is known in Germany, became one of the standard and important products of agriculture, and every effort has been made by the imperial and state governments to promote and extend its use for domestic and industrial purposes. A law was passed in Germany which maintains a very high tax on alcohol intended for drinking, but exempts from taxation such alcohols as are denaturized and used for industrial purposes. Since the passage of the above law, inventors and scientists have been busy in the improvement of processes and the manufacture of distilleries. Now perfected motors, lamps, and cooking and heating apparatus have been devised and put in use, until crude alcohol is becoming one of the most widely utilized products of German industry.

ALCOHOL FOR LIGHTS AND POWER.

For lighting purposes, as alcohol gives a non-luminous flame, a chemical mantle is used similar to the Welsbach burner, which produces a very bright, intense and economical light, costing but one cent per burner, per hour, for 71 candle power. For the production of heat generally it is simply perfection, and nothing has yet been found to equal ethyl alcohol for this purpose, owing to the fact that it produces perfect and complete combustion.

Alcohol made repugnant to the taste is being used as an incandescent light. Instead of being drunk, it is burned. It propels the farm motor, the automobile and launch, and the simple fact of obtaining denaturization permits each private citizen to light his farm or factory, to heat his home, do farmwork, or transport himself. One of the neatest of the many new devices used in Germany is an alcohol flatiron with a small reservoir, which being filled with alcohol and lit, heats the iron for the hour's work, at a cost of less than two cents. The cleanliness and economy of these figures to the housekeeper, are obvious. For farm motors alcohol is a perfect fuel because of its complete combustion, the absence of its noxious odors, its uniform quality and its unlimited and universal sources. While it is true that the heat of combustion of alcohol is practically only half that of gasoline, yet twice as large a percentage of heat can be converted into useful work as in gasoline, and hence point for point, alcohol is as efficient as gasoline.

ALCOHOL ENGINES.

Only slight modifications of gasoline engines adapt them to the use of alcohol—a fact which is of much importance, since an engine to be efficient and practical for general use must not be too highly specialized. Because of the great elasticity of the charge after ignition, the stroke on an alcohol engine to be most efficient ought to be about double the bore of the cylinder. A high compression and comparatively cool mixture should be attained, and a good spark, complete vaporization and a complete mixture of the charge secured. Alcohol of 90 per cent strength, with 10 per cent of water is usually employed. Wherever small engines can be used and a power safe in every respect is of value, the alcohol motor can be advantageously employed. Its spread during the few years of its existence in Europe, has attained quite unexpected proportions, and will doubtless continue. Since 1896 the law in Belgium has exempted from taxation alcohol for industrial uses. Since that time this has also been done in France, Austria, Hungary, Belgium, Italy and Russia.

ALCOHOL BEFORE THE GREAT WAR.

Special documents show that in the United States alcohol was used for lighting, cooking and industrial purposes in the early sixties. Before the war of secession, the manufacture of spirits was free from all special taxes and supervision, as much on the part of the Union as on the part of the States which composed it. It resulted from this freedom that alcohol served a multitude of industrial uses. The production was enormous, amounting to 90,000,000 gallons, coming especially from the distillation of corn. For lighting purposes enormous quantities were employed. In 1864 the city of Cincinnati alone utilized 12,000 bushels of corn per day for distillation. Because of its low price, alcohol was also used as fuel for the domestic kitchen, for bath and laundry. Denaturized alcohol has been produced in Germany chiefly from potatoes, and sold for 13 cents per gallon. It is stated in the March number of Power, 1901, that a New York distiller produced alcohol at a cost of 8 cents per gallon. It was sold in New York in carload lots at \$2.26. The tax is \$2.08 per gallon, which would leave 18 cents

to cover cost of production, profit, and risk of tax. Distillers claim that from 40 cent corn, alcohol can be manufactured for 13½ cents per gallon of 94 per cent strength. In Cuba, Peru, Brazil and other sugar-producing countries, alcohol is manufactured from the waste products, and hence very cheaply produced. The present price in Cuba is about 10 cents per gallon. It is thus seen that alcohol can successfully compete in price with gasoline, which now sells for from 12 to 22 cents per gallon. There is an urgent need in this country for free alcohol in the field of heat, power, and light.

GASOLINE ENGINES.

Within the past five years there has been a remarkable increase in the output of gasoline engines, and more particularly among the smaller sizes. When the fuel requirements of the engines of a rapidly growing automobile industry, in addition to an annual output of over 100,000 gasoline engines, is contemplated, it becomes a question of the most vital importance. The average percentage of gasoline in petroleum from all the oil-fields of the world is less than 2 per cent, and this fact taken in connection with the constantly increasing demands, accounts for the great increase in the price of gasoline within the past few years. The supply must eventually be exhausted. In view of these facts it seems apparent that through false economy the people may be deprived of a natural resource. The use of alcohol for fuel-purposes would benefit the farm by producing a market for a great many starchy materials unfit for, or unnecessary to consumption, and at the same time reduce the cost of motive power for farmwork.

The fact that all foreign countries have laws providing for free industrial alcohol and that alcohol is being successfully employed by these countries for such purposes to the great injury of our own trade, is striking evidence of the wisdom and practicability of removing the tax on alcohol in this country. A law for this purpose will bring prosperity to the greatest body of our best and truest citizens, the American farmers, who will derive from their farm products of corn, wheat, potatoes, and waste products, denaturized alcohol, by which they will be able to light and heat their homes, cook their food and drive their engines; which will furnish power for the farm implements, pump water for the cattle and for irrigation, as well as numerous kinds of other farm labor. Favorable action on a subject of such vast importance and one in which the need for action is becoming so acute, should not be long delayed by a government "committed to the protection of home industries." Every one who uses one or more of the thousand articles requiring alcohol in their manufacture; every one who is obliged to accept cheap and noxious substitutes which may be foisted upon him instead of alcohol, for legitimate purposes, and every one interested in the price of corn and other farm products of which alcohol may be manufactured, has a grievance against the present system of taxation now in force.—C. J. Zintheo, U. S. Department of Agriculture, in The Gas Engine, January, 1906.

Last Word on the Boys' Corn-Growing Contest.

EDITOR KANSAS FARMER:—The Boys' Corn-Growing Contest, started by the Kansas State Agricultural College, promises to go way beyond the expectation of the Institute Committee. It certainly has struck a popular chord and has appealed to farmers and business men as a worthy movement. It was the intention of the college committee to leave large latitude for the county committees in the matter of seed-corn and prizes. For the most part, corn is being selected from nearby farms, although many are sending to distant parts of Kansas, and some to Iowa and Illinois.

All local committees should now set a date when entries must close, and a date and place or places for distribution of seed-corn. By May 1, 1906, I want to receive from each local or county contest committee the following data: (1) Number of boys enrolled in the contest. (2) Variety or varieties of corn furnished to the boys, and cost of same, if purchased. (3) Amount of premiums offered and whether in cash or merchandise. (4) Entire premium list, including those for quantity as well as for best ten ears. (5) A printed list of names of contestants with post-office addresses. This may be cut from county or local papers publishing same.

The work should be pushed vigorously now in these next few weeks. It is hoped that every county in Eastern

Kansas will have not less than 200 contestants, and many counties will have 500 enrolled. This is a movement worthy of the time and thought and labor of the busiest men of any community.

Many counties have offered additional premiums for the greatest yield obtained from one quart of corn. Many of the committees have also made the contest open to girls.

The Institute Department will gladly co-operate in any further way for the success of the movement.

J. H. MILLER,
Farmers' Institute Secretary.

Alfalfa on Sod.

Editor Kansas Farmer: I would like to inquire through the columns of your valuable paper if there is any one raising Iowa Silver Mine corn west of the Fort Hays station, that has a few bushels of seed to spare? If so, would like to have him write me at Banner, Kans.

I wish to say in answer to E. L. Kellogg's inquiry in the issue of March 8, as to sowing alfalfa on sod, that I have had very good luck in seeding alfalfa on freshly-broken sod, if broken deep and well pulverized with a disc, especially so on sandy land. I consider the time when the sod is first broken up the best for sowing alfalfa on sandy soil. I prefer broadcasting to drilling, and I harrow the seed in by using a slanting tooth harrow. I consider 10 pounds No. 1 seed sufficient for a good stand.

F. P. MANZER.

Trego County.

Farm Notes.

Care and fertilizers make the farm; care and feed make the stock.

A little turpentine in their feed speedily relieves animals troubled with worms.

By using the drill for sowing, the depth of covering is uniform and there is no loss of seed.

The effect of overfeeding is very disastrous in most cases and especially so when the stock is quite young.

The productiveness or unproductiveness of the farm depends chiefly on the farmer and his methods.

About one-half of the time when stock is fed for a certain market, it is sold at a disadvantage.

The richness of the food given to stock has much to do with the value of the manure made from it.

No farmer makes a mistake when he determines to make his manure pile as large as possible so that every source of fertility shall be utilized.

The best way to make the hay crop profitable is to feed it on the farm and return the manure to the soil.

Thorough cultivation is essential to good crops, but thorough preparation of the ground before planting is just as essential.

Clay ground should never be plowed when wet, but very gravelly or sandy soil may sometimes be plowed wet without much damage.

In nearly all cases, the wisest course is to convert the grain into meat before shipping it to market and thus keep up the fertility of the farm.

Comfort is a prime condition of animal growth and this can be secured only by comfortable surroundings, such as warm, dry stables and sheds.

In using kerosene in killing lice on stock, mix it with lard about half and half, or it may take all of the hair off, if it does not otherwise injure the stock.

As the season comes in for active operations on the farm, do not, in the rush of work, forget the improvement of the stock. Keep better breeding animals the coming year than ever before. Buy blooded males of the best strains and grade the herds and flocks up to a high standard as soon as possible.

N. J. SHEPHERD.

Eldon, Mo.

The Price of the Surplus is the Price of the Whole Crop.

What to do with our surplus products is a problem of vital interest to the farmer. The manufacturer complains bitterly of what he calls his "surplus," but the manufacturer does not have to operate his plant at full capacity unless the trade will take his output. Nine-tenths of the manufacturers of the country work only on orders or contracts, and shut down or reduce their working force whenever they can not obtain orders. Very few manufacturers make up goods and then wait for customers to come.

The farmer, however, does not produce his crops "to order." When he sows his wheat he has no means of knowing whether the crop will bring 50 cents or \$1.50 per bushel. He must trust to the market for the price, and to nature for the crop. The same un-

Now IS THE TIME! GET A GOOD READY FOR HARVEST

You have heard of the cow that gives a big pail of milk and then at the last moment kicks over the bucket and spoils it all?

What about the man who grows a good crop of grain and then *half* harvests it?

You wouldn't waste *half* your crop.

Of course not.

But why waste *any* of it?

Why not get it *all*?

As the boys say, "Every little bit helps."

Every little bit *wasted*, counts—and counts *against* you and your profits.

As a sensible farmer, you can't afford to approach harvest time without making sure that you are ready for it the very minute that your grain is ready.

You cannot afford to depend upon a harvesting machine that wastes even a small part of your grain.

You cannot afford to spend your money for a "may-be-so" harvesting machine—one that may or may not do your work for you in a satisfactory manner.

You cannot afford to start harvesting with a machine that may break down at your busiest moment.

You cannot afford to start harvesting with a machine that will half kill your horses before your grain is cut.

You cannot afford to start harvesting with a machine that is likely to cause delay in your work.

You cannot afford to take chances.

You want to be sure, and now is the time to make sure.

Go to the Nearest Dealer

Examine for yourself the line of standard harvesting and haying machines for 1906. Get a catalogue and study their construction. You will find in

Champion, Deering, McCormick,
Milwaukee, Osborne, Plano

lines harvesting and haying machines that meet your every expectation and fill your every requirement.

They are *right* in principle and design, for they are the product of a half century's inventive genius. Every improvement that the best mechanical experts of the world have been able to discover or devise in 50 years is embodied in their construction. That's why they are *so* convenient to handle—why they do their work so well. That explains too why they are *so* easy on man and horse—and why they waste so little grain.

They are *right* in materials, for their manufacturers by co-operation are able to produce and select the best materials. By co-operation they are able to own, control and operate their own lumber camps, their own iron mines, their own coal mines, their own coke furnaces, their own steel mills and other sources of raw materials, thus being sure at all times to have materials for making their machines of the highest quality.

They are *right* in workmanship, because the demand for these standard machines is so great that immense factories are necessary for their production, and their manufacturers are able to equip the factories with the best facilities and the most expert workmen?

They are *right* in reputation, for they have by their own merit survived years of strenuous competition. They gained their popularity solely on their merits. They retain their popularity in the same way. They are used all over the world solely because they have met the demands and filled the requirements of grain-growers and grass-growers.

Is not that just the machine you need for your harvest for 1906?

You certainly want a machine with a reputation behind it—you cannot afford to run risks. Where can you find a machine of any kind that has a record of more years of successful, satisfactory work than you know these machines to have?

You want a harvesting or a haying machine made of the right materials. No machine can have *better* materials than have these machines—few manufacturers are fortunate enough to secure so good.

You want a machine that is built on the right plan—that "works right"—that is constructed on the right principle. The approval of the grain growers of the whole world—the successful standing of the test of years—the ever increasing popularity of these machines—these things tell the story of how they are built and how they work.

In reputation, in workmanship, in materials, in design—in all that goes to make good harvesting and haying machines they are *right*. They will meet your every requirement.

Can you afford then to go into the harvest with a machine that may fail you?

Can you afford to run the risk of a "break down" at a critical stage of your harvesting?

Can you afford to waste a part—even a small part—of your grain or grass?

Don't do it but go to the International dealer, secure a catalog, inspect these machines, and "get a good ready for harvest."

If you don't know an International dealer—write to us for the name and address of one near you.

**INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.
(INCORPORATED)**

International Line—Binders, Reapers, Headers, Header-Blowers, Corn Binders, Corn Shockers, Corn Pickers, Huskers and Shredders, Corn Shelters, Mowers, Hay Tedders, Hay Rakes, Hay Loaders, Sweep Rakes, Hay Crackers, Hay Blowers, Hay Cutters, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons, Binder Twine.

Certainty prevails in live stock and every other product of the farm. When his products are ready he ships them to market and takes his chances. He can not, like the manufacturer, close his plant or reduce his force. He must go on, year after year, raising all that he can and trusting to the market.

In nine years out of ten American markets for farm products are made by the volume of the surplus which must be exported; and the Western farmer must trust to the demand of foreign countries for his price. In normal years about 30 per cent of our wheat and our commercial productions of meat must be shipped out of the

country. More than 60 per cent of our cotton and about half our tobacco goes abroad, and directly or indirectly, about a quarter of our corn crop is surplus.

Twenty-five years ago our surplus of live stock and provisions had grown to \$175,000,000. In the next two years, when the markets of Continental Europe were closed to our cattle and our pork, our exports declined about \$60,000,000, and the great pressure of the surplus on our markets caused a ruinous fall in the values of live stock in this country. American houses searched the world over for other markets, and our exports gradually recovered, and in 1890 the German market was reopened

to our pork. The exports of the live stock industry, by 1900, had grown to about \$260,000,000. In the past three years, however, Germany has gradually closed her ports by new inspection laws, and her influence has been exerted in other countries to shut us out, and our foreign trade in meats has been declining. The surplus is left in our markets and is helping to cause depression in prices.

Hence the importance of the reciprocity movement now in progress. Every farmer in the country should ask his Congressman and Senators to help open the Continental European markets to our grain and meats.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

April 3, 1906—James Stock Farm, Willard, Kans., trotting-bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gilford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita Knus. D. R. Mills, Des Moines, Iowa, Manager.

Feeding Questions.

I wish some advice along lines on which we have never had any experience. We expect to sell our land some time this year, perhaps before fall, although will probably not give possession until January or March. It is our intention to feed out about eighty head of average cattle, nearly all she stuff. They will range from three to seven years old and about fifty will soon have calves, say in the next eight weeks, the majority in March. The intention is to feed for the January or March market. Feed will be alfalfa, raised on 45 acres, all the cuttings, Kafir-corn cut with harvester and cared for in good shape, sorghum broadcast-

at this long range, I do not know whether I can be of much service in helping you to solve the problem.

I understand that it is your intention to dispose of all cattle on the place, not later than March, 1907. From the fact that all ages and undoubtedly various types of cattle will be included, it will be impossible to put this bunch of cattle on the market much above the butcher class of cattle. It probably would not be good policy to try to make too great use of expensive grain to finish them. You will undoubtedly be able to raise an abundance of good roughage. The 45 acres of alfalfa will yield you at least 200 tons of hay and, if this amount can be well cured, you will have a most valuable feed ready in sufficient quantity to put these cattle in fair condition. To supply the grain of the ration, I would suggest that you raise all the somewhat thickly planted fodder-corn possible. If the season is favorable and you succeed in getting considerable grain in this fodder, it will greatly aid in putting the cattle in good condition for market. If the pasture is good, the cattle will probably thrive and gain well during May and June. As soon as the pasture shows any signs of failing, the feeding of fodder-corn should be started and it would be well to have some early-planted corn for this purpose. From this on, the cattle should be fed a suffi-

three or four months before they are to be sold. You should, of course, run some hogs after these cattle to save the corn and this bunch of shoots, which you have on hand, will be in good shape for this purpose and you can carry them through the summer on pasture, alfalfa if possible, with very little grain. They will have size and frame and will not have cost very much and will be in good condition to utilize the undigested grain dropped by the cattle. You may find it necessary to feed a little corn extra to the hogs in order to get them ready for the market when the cattle go.

G. C. WHEELER.

To Poland-China Breeders.

EDITOR KANSAS FARMER:—At a meeting of representatives of the four breeds of hogs, viz; Berkshires, Poland-Chinas, O. I. C.'s and Duroc Jerseys, recently held at the Kansas City Stock Yards, it was unanimously decided to hold a breeders' show for the above-named breeds. The American Royal directors proposed to this committee to duplicate for prizes any amount, not exceeding \$150 each, raised by each breed. I ask all Poland-China breeders interested in this show to please give me their views in regard to this matter and let me know by April 1, what amount they will contribute for these

Kendall's Spavin Cure

What horseman does not know the standard cure? Infallible when taken in time for Ringbone, Curb, Splint, Spavin. Never two opinions as to its powers.

Bone Spavin Entirely Cured.

Kenton, Ohio, Feb. 20, 1905.

Dr. B. J. Kendall Co.,

Enosburg Falls, Vt.
Gentlemen:—I had a fine horse which I priced at \$200.00, which got Bone Spavin almost half the size of a hen's egg; I used two bottles of your Liniment and entirely removed the Spavin and now no one can tell one limb from another.

Yours truly,
Lawrence Althauser.

Price \$1; 6 for \$5.
Greatest known liniment for family use. All druggists. Accept no substitute
"Treatise on the Horse" free from druggists or

Dr. B. J. Kendall Co., Enosburg Falls, Vt.

Dipolene

IP

For All Farm Stock

Every farmer should dip his stock in Dipolene—promotes health.

Prevents Disease

It kills sheep ticks, lice on hogs, horses and cattle, fleas on dogs. Cures scab, eczema, mange and all skin diseases on domestic animals; lice on chickens. Dipolene does it in a minute without injury. One gallon makes 100 gallons of dip ready for use. Write today for price and free booklet, "DIPPING FOR DOLLARS," learn how easy it is to dip.

MARSHALL OIL CO.,
BOX 13,
MARSHALLTOWN, IA.

KRESO DIP

KILLS LICE

ON ALL LIVE STOCK EASY & SAFE TO USE



PARKE, DAVIS & CO.

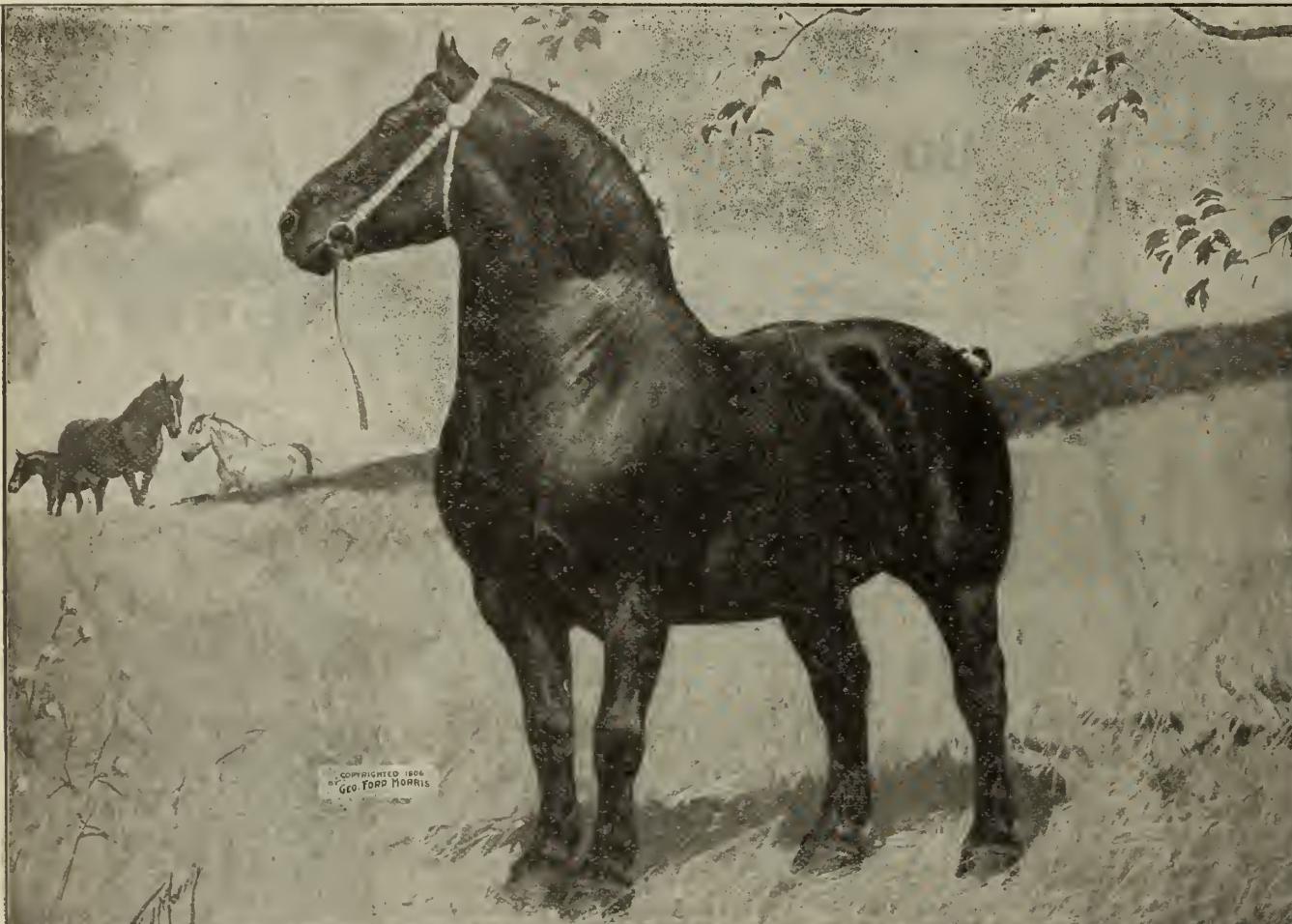
HOME OFFICES AND LABORATORIES:
DETROIT, MICH.

BRANCHES: NEW YORK, CHICAGO, ST. LOUIS, BOSTON,
BALTIMORE, NEW ORLEANS, KANSAS CITY, INDIANAPOLIS,
MINNEAPOLIS, MEMPHIS, U.S.A.; WALKERVILLE,
ONT.; MONTREAL, QUE.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON,
Elmdale, Kansas.



Rosemberg 40447 (55713), First in Class and Grand Champion at Minnesota State Fair 1905, Lewis and Clarke Exposition 1905 and the International Live Stock Exposition 1905. Defeated the International Grand Champions of 1903 and 1904. Imported and owned by McLaughlin Bros., Kansas City Columbus and St. Paul.

ed with some Kafir mixed, about one-fifth Kafir. This mixing does not make the stock so lose and is eaten with a better relish too. Corn was planted thickly in June for fodder and bound. We want to use little, if any, corn. My idea was to feed late-planted corn when pasture begins to fail, but when stover gets dry then what?

I know a bunch of steers fattened on alfalfa, exclusively, that averaged 1000½ pounds each. No other feeds were given them. Unfortunately, no one knows how much feed was consumed but the owner was well satisfied with the results.

Would you advise breeding the cows with a view of their fattening better? This I should like to have you answer fully for people differ so on this subject. We have never had any experience so these questions which may seem very simple to you are perplexing to us.

We have used a Duroc boar on well-bred Poland-China sows. Nine sows now have 53 pigs, seven being first litters. These were September and October pigs. They are weaned now, of course, and not a runt among them. Every person who sees them comments freely on them. The result of crossing is very satisfactory indeed. Will breed no further of course. S. I. WILKIN.

Rooks County.

The proposition which you have before you is a somewhat difficult one and,

client quantity of the fodder-corn to keep them gaining. As soon as the corn begins to dry, you had better begin feeding alfalfa hay and continue through the winter giving them what alfalfa they will consume and in addition, fodder corn. Kafir-corn may be used but the grain will not give as good results when fed in this way, it being so small and hard that it is not properly masticated.

As to the disposal of the calves which will undoubtedly run with the cows through the summer, I would suggest that if the prices for veal remain good that might be the best method if disposing of them. If they are not sold as veal calves while they still retain the calf-fat, it will be necessary to carry them through the winter as stockers, feeding plenty of alfalfa and some grain. You could hardly hope to mature and finish them as baby beef by March, so that they would have to be sold as stockers if carried through until that time. They should not be allowed to suffer hardship through the winter and should be kept gaining at least a pound to a pound and a half daily. Experiments have shown that it does not pay to keep calves through the first winter upon a ration of hay alone, although if first-quality alfalfa hay be used, this statement might not hold good.

Cows in the fattening-pen will be quieter and feed better if they are bred

prizes, so we will know just what we can do.

There will be no entrance fee to this show.

E. E. AXLINE.

Oak Grove, Mo.
Committeeman for Poland-Chinas.

Caring for Sows.

The American Swineherd gives the plans of two practical and successful breeders in caring for their sows at farrowing time, which they have adopted as the results of twenty-five years' experience:

"My method of saving pigs at farrowing time is to get the sows in good condition before they begin to farrow by giving them plenty of exercise by a good range in a pasture field, which brings their system into a condition for easy farrowing. It prevents them from becoming restless in getting up and down while farrowing, which is one of the reasons for sick pigs. About two days before she is due to farrow I put her in a lot by herself, make her a nice bed and am around her a great deal to get her tame and accustomed to me so she will not be afraid. Then scratch her and have her lie down, and she will become quiet and very docile at farrowing time. No matter how the sow acts, never strike or kick her at this time. She never forgets it. She appreciates good treatment at this time. Take her pigs as fast as they come and put them in a basket. In cold weather

set them behind a stove until she is through farrowing. Then with a pair of little pinchers take off the little tusks so that they will not bite their mother or each other. You will find upon examination that the little pigs have eight long teeth, four below and four above the mouth. Now, if you break these teeth off when they first arrive or are not over a day old, there will be no sore noses or mouths, as you oftentimes see them. Nor will your sow be jumping up every little while. It is these eight sharp teeth that cause the trouble and the loss of many a good pig. She jumps up when they bite her and drops down as quick and catches one or more of the pigs under her. Experience has taught me to prevent this by disposing of these little tusks. If they are not snipped off they not only endanger their lives by the sows lying on them, but become embroiled in bitter fights which leave them with sore mouths that become fatal if not looked after. Too much importance can not be given this little transaction of de-tusking the little pigs at birth.

"A breeder should stay with his sows himself in the time of farrowing if he desires to save the pigs. It is difficult to hire any one who will take as much interest as yourself. If you get the pigs one week old you are safe with them, or at least I am.

"This is my method of saving pigs and I generally can save as many as the sows can take care of.

"Our pigs will begin to come the forepart of February, and if any of the boys want to see me at that time they will have to come to my hog house, as I am on deck at that point."

The second plan is:

"The sow is let go at will until she is due and when she shows signs of maternity or making her bed, she is quietly placed in a pen by herself. The person who knows the day of service can tell almost exactly what time she will farrow. Farrowing 112 to 115 days from the date of being bred.

"The owner should make it a point to be with the sow at the time of farrowing and see that the pigs get started right. They usually farrow at night and a person should not be above his business and should be on hand looking after these things. This is when a person will be well paid regardless of time of night to watch carefully the farrowing sow. If she shows no indication of being restless, she should be let alone at least twenty-four hours. Then for the first few days after farrowing she is fed lightly but gradually carried up to full feed as the pigs grow older. Care must be taken and not carry the pigs along too fast. A fat, overdone pig when young is a ruined pig for future development."

Concentration of Business Interests Brings Buyers.

EDITOR KANSAS FARMER:—A Kansas man never loses interest in his own State no matter where he may be located. During the last few months that I have been away from Kansas, I have observed a number of the things that the progressive farmers and stock-breeders of Wisconsin are doing, and invariably and almost unconsciously, my mind compares the methods employed with those that exist in Kansas.

One of the things that is being agitated and pushed at the present time is the concentration of agricultural interests in a given community. For instance, the Holstein-Friesian interests are being pushed at Lake Mills where a number of breeders are producing this class of cattle. A buyer looking for Holstein cattle invariably goes to Lake Mills because he has a greater opportunity for selection, and, if he is a heavy buyer, can probably get what he wants in car-load lots. The benefit derived from the concentration of business interest is shown by the fact that \$200,000 worth of registered and grade Holstein cattle have been shipped from this one point during the past year. Not infrequently a buyer wants an animal of a certain age, and if the breeder does not have what is wanted the buyer is referred to his neighbor who is ready to supply the demand. By the breeders' working for each other in this way, they not only advance their own interests, but the interests of the entire community.

At other points in Wisconsin the Guernseys are being pushed in the same manner. The breeders are not only cooperating in the selling of cattle, but they cooperate in the use and exchange of bulls. Whenever they find an extra good bull they do not allow him to leave the community, but pass him around from one breeder to another as long as he is a serviceable animal.

Other things being equal, mature sires produce the best offspring.

This method of cooperation and concentration of breeding interests is being practiced, I believe, in Marshall County, Kansas, by the Hereford breeders. Would that there were many other communities that would cooperate by selecting some one breed of cattle, or one breed of hogs and then push that breed for both quality and numbers and thus attract numerous and influential buyers.

D. H. OTIS.
University of Wisconsin.

Western Feeds for Beef-Production.

Bulletin No. 132, just issued by the State Agricultural College Experiment Station, Manhattan, Kans., is a detailed account of an experiment in steer-feeding at the Fort Hays Branch Station. Sixty-four head in eight lots were used. The experiment included a comparison of the roughages, alfalfa hay, Kafir-corn hay, and sorghum hay, and a mixture of these; comparison of the grains, corn-and-cob-meal, Kafir-corn, wheat, and a mixture; and a comparison of different proportions of protein. In general the results showed the very great advantage of the use of alfalfa hay and of the balanced ration.

Following is a statement of the general conclusions reached:

For beef-production, ground Kafir-corn is about equal, pound for pound, to corn-and-cob-meal when alfalfa hay is fed with either of these concentrates. However, with sorghum hay as roughage, it required 57 pounds more of the ground Kafir-corn than of the corn-and-cob-meal to produce 100 pounds gain. As would naturally be expected when the Kafir-corn hay constitutes the roughage of the ration, 232 pounds more of the ground Kafir-corn than of the corn-and-cob-meal were required to produce 100 pounds gain. Cattle can be well finished for the beef market on a ration of ground Kafir-corn and alfalfa hay.

Ground wheat and alfalfa hay, fed together, is not an economical ration for beef, on account of the loosening effect of these feeds on the steers and the expensiveness of the wheat. With corn-and-cob-meal at 45 cents per bushel and wheat at 78 cents per bushel, the cost of 100 pounds gain, when both are fed with the alfalfa as roughage, is \$5.13 with corn-and-cob-meal and with the wheat is \$8.50, or a difference of \$3.37 in favor of the former.

A matter of this experiment of considerable interest, especially to the Western farmer, is the part that the various roughages play in beef-production. A ration of alfalfa hay, at \$4 per ton, with corn-and-cob-meal produced 100 pounds of gain for \$5.13; but when Kafir-corn hay at \$3 per ton was substituted for alfalfa hay, the cost of 100 pounds of gain was increased to \$7.32, while with sorghum hay at \$3 per ton substituted for the alfalfa hay the cost was increased to \$9.06. In other words, one bushel of corn-and-cob-meal fed with alfalfa hay as roughage produced 11.8 pounds of flesh, while the same amount of corn-and-cob-meal fed with sorghum hay as roughage gave in return only 6.25 pounds of flesh; thus, a difference of 5.5 pounds, or 88 per cent in favor of the alfalfa hay ration.

There is yet much to learn about the most profitable combination of Western feeds for Western conditions, though the evidence is certainly good that it pays the stockman in dollars and cents to study this feeding problem as far as it is worked out by science and wait for further results. It is the opinion of the writer that the Western feeds grown without irrigation have the chief food constituents in a slightly different proportion from those grown under more favorable conditions, though the nutritive ratio, of the rations fed, and the profit per steer have a direct relation to each other. For practical work the results would be little changed by this difference in composition.

The nutritive ratio of the corn and alfalfa ration was 1:6.79, or practically a balanced ration, and the average profit per steer was \$8.98; the nutritive ratio of the corn and Kafir-corn hay ration was 1:14.98, or an unbalanced ration, and the average profit per steer was 90½ cents; while the nutritive ratio of the corn and sorghum hay ration was 1:17.29, or much too low in protein and a decidedly unbalanced ration, the average loss per steer being \$1.66. The difference, then, between feeding a balanced and an unbalanced ration was an average profit, per steer, of \$8.98, with the former and an average loss, per steer, of \$1.66 with the latter; or \$10.64 per steer in favor of the balanced ration.

The results of the feeding test with 56 calves conducted at the Experiment

Farmers Say

SLOAN'S LINIMENT



Is the Best Remedy on Earth.
Kills a Spavin Curb or Splint.
Very Penetrating. Kills Pain.

DR. EARL S. SLOAN, 615 ALBANY STREET, BOSTON, MASS.

BLACKLEGOIDS



THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill. No string to rot. Just a little pill to be placed under the skin by a single thrust of the instrument. An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVIS & COMPANY.
DETROIT, MICHIGAN, U.S.A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Memphis, U.S.A.; Walkerville, Ont.; Montreal, Que.

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Originators of Dipping Tubs. 1501-03 Genesee St., Kansas City, Mo.

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with

Fleming's

Fistula and Poll Evil Cure
—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Packet Veterinary Adviser

Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Dearly bound, indexed and illustrated.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

60 DAYS FREE

WE WILL SEND

any windmill we make to
any address to be given
60 DAYS FREE TRIAL; you
compare it with windmills that others sell in
two to four times our
price, and if you don't
find our windmill runs
easier, has more power, requires less
attention, easier to set up and handle
(any farmer can easily set it up),
pumps more water, runs in lighter
wind, if you don't find it stronger,
handier, better made and worth
more than any other windmill made, return it to us
at our expense, and we will give you a refund.

\$11.12 buys a new 1906 Kenwood all steel,
any windmill, any size, any height, any
anywhere can set up in few hours. \$12.00 buys
our latest 1908 style, best and strongest all steel tower.

OUR FREE OFFER. Cut this advertisement out
and send to us, or on a
postcard write letter to us, say, "Send me your Free
Windmill Offer," and you will receive by return mail,
our latest big Special Windmill Catalogue,
showing a great variety of pumping and power wind-
mills in all sizes, a great variety of steel towers, tower
lamps, etc., you will get all our Free Trial Offers, the most
wonderful windmill proposition ever heard at

THIS BIG-FOOT TALL SIZE
COUCH TRUE. If you let us send
you a windmill or other goods,
you will also get this great Free

Couch Offer. If you will write to us, Free Windmill
Offer Address, SEARS, ROEBUCK & CO., CHICAGO



is one of the largest consignors to the auction, including about a dozen head of Prides, Queen Mothers and other good strains and sired principally by Invincible Blackbird a son of Heather Lad 4th and the cow Blackcap 4th a full sister to the noted bull Black Knight. Invincible Blackbird is one of the best bred Blackbird bulls that was ever in service in America and his get in this auction are uniformly good and demonstrate conclusively the value of his blue blood. George H. Maize, Happy Valley, Mo., consigns sons of Christo of Longbranch bred by the Messrs. Escher, sired by the famous Heather Lad of Emerson 2d and out of a Heather Bloom dam sired by Heather Lad of Turlington. The cows consigned by Mr. Maize are sired by Hot Staff, a Heroine that was bred by Mr. Elliott and sired by the Erica bull, E Rex, a son of Imp. Kabul.

Sixty head are catalogued for the auction and a full list of the consignors will be found in the advertisement. The various offerings should attract buyers of this breed to Kansas City at this time.

Hutchinson's Sale a Winner.

C. F. Hutchinson's sale of Poland-Chinas at Norton, Kans., Saturday, March 24, was a great record-maker for this breed of hogs in Northwestern Kansas. Although the day was very stormy, there were many buyers present, and the animals brought good prices. Thirty-two head brought an even \$1,000, an average of \$33.14. W. R. Dowling, of Norcatur, topped the sale with a 2-year-old sow at \$80. The next highest price was \$66 paid for a yearling gilt by R. H. Keir, of Oberlin, Kans. Col. Bert Fisher, of Topeka, cried the sale. Mr. Fisher is well known to the breeders of Northwestern Kansas and he always gets good prices. The following is a complete list of the animals sold and the prices paid there-for:

1. Ed. Inman, Oberlin.....	\$45.00
2. J. Hackney, Norcatur.....	39.00
3. W. R. Dowling, Norcatur.....	50.00
4. Frank Michael, Summerfield.....	55.00
5. Jas. Holmes, Densmore.....	36.00
6. A. L. Drummond, Norton.....	30.00
7. D. M. Ward, Norcatur.....	31.00
8. H. W. McAfee, Topeka.....	25.00
9. R. H. Weir, Oberlin.....	27.00
10. H. W. McAfee.....	22.00
11. A. C. Foley, Norton.....	21.00
12. W. R. Dowling.....	30.00
14. R. H. Weir.....	20.00
15. A. L. Drummond.....	29.00
16. J. Hackney.....	43.00
17. R. H. Weir.....	66.00
18. I. B. Prichett, Norton.....	26.00
19. R. H. Weir.....	37.00
20. Fred Kingman, Norton.....	24.00
21. E. Frey, Almena, Kansas.....	25.00
22. A. A. Shadlaw, Almena.....	22.00
23. E. Frey.....	37.50
24. J. M. Ward, Norcatur.....	30.00
25. Fred Kingman.....	20.00
25½. W. L. Bucklock, Norton.....	20.00
27. R. H. Weir.....	30.00
28. A. C. Foley.....	17.50
29. Fred Kingman.....	25.50
30. Earl Stedward, Norton.....	22.50
31. F. E. Gilder, Norton.....	27.00
32. W. R. Dowling.....	80.00

The Great Hereford Combination Auction at Kansas City, April 4.

When such breeders as Gudell & Simpson, Scott & March, Dr. J. E. Logan, and others mentioned in the advertisement in this issue, unite for a combination auction, Hereford breeders generally understand that high class animals will be the rule there and that culs will not be in evidence and that fair treatment will be accorded in every way to all bidders and purchasers at this auction. The blood of the great Anxiety 4th, The Grove 3d, Imp. Improver, Hesiod 29th, March On, Columbus, and numerous other noted sires will be found concentrated in these animals. The Dr. Logan sale of fifty head on April 5, the day following this combination sale, renders this a grand time

A chestnut stallion colt sired by Es-

for those interested in Herefords and those desiring herd headers or to add attractive females to their herds, to take a trip to Kansas City. The character and quality of the various offerings will well repay them for it and we hope to see the auctions well attended.

The Heath Shorthorn Sale.

In this issue will be found the announcement of the seventh annual sale of Shorthorn cattle from the Heath ranch, two miles south of Republican City, Neb. The sale is on April 4, Wednesday, and will consist of some thirty head or more of young cows, heifers and bulls from this, one of the oldest established herds in southwestern Nebraska, and one of the best consignments ever offered. Nearly one-half of the offering is good, strong, lusty young bulls, from ten months old up. The young cows and heifers are nice young, well-bred animals, from a milking strain of cows, by well-bred sires, such as the straight bred Scotch bull Lancaster Royal 168270 by Imp. Prince Oderic, etc., Golden Victor Jr. 175464. While the latter bull is the sire of most of the offering, the cows old enough to breed are in calf to Lancaster Royal. Several are by Aberdeen Lad 154974 one of the grand herd bulls. In this sale are three fine Double Standard Polled Durham bulls that are ored along good dairy lines.

Besides the cattle, there will be sold a lot of high-grade Percheron horses and several teams of work horses and bled Poland-China gilts, farm implements and other utensils, thus making it a very important sale. The catalogue is out and will be sent on application. Send for it and come to the sale and it will be a day well spent, whether you buy or not.

The Butler, Mo., Sales.

U. S. Ison, M. G. Sellon and J. L. Gere combined their herds and made a sale of Poland-China swine and Shorthorn cattle at Butler, Mo., on Friday, March 23. Although hampered by unfavorable weather conditions which served to reduce the crowd of buyers, they made a fairly satisfactory sale of Poland-Chinas. The Shorthorn sale was disappointing.

Twenty-eight head of Poland-Chinas sold for \$905, averaging \$32.32. Eighteen sows and gilts averaged \$39.36 and 10 boars, 5 of which were late fall pigs, averaged \$19.65.

The 16 Shorthorns in the sale were nearly all bulls that ranged in age from August calves to 18 months old. Because of the rain and the small crowd, these cattle sold low. Those who bought hogs were H. H. Harshaw, Butler, Mo., R. E. Blatt, Clinton, Mo., T. A. Church, Lone Elm, Kans., W. G. Sellon, Butler, Mo., L. G. Thomas, Butler, Mo., L. T. Paddock, Butler, Mo., J. L. Gere, Butler, Mo., Jas. Brown, Butler, Mo., G. W. Taylor, Butler, Mo., D. V. Stall, Lone Elm, Kans., F. D. Winn, Mastin, Kans., and W. Woody, Butler, Mo.

Diamond Creek Horse Sale.

Hon. J. W. Creech, of Herington, Kans., held his second sale, comprising a draft of Standard-bred horses from his Diamond Creek stock farm. The offering consisted of a few brood mares, young stallions, geldings and youngsters. The sale was held at the farm adjoining Herington on March 26, and notwithstanding the disagreeable day there was a good attendance and splendid prices were realized and every thing catalogued sold except a few of the younger colts, besides a number of horses were sold that were not catalogued. Thirty-two head sold at an average of \$180.

The top price was \$685, for Anglebar 0707, the bay horse sired by Escobar, which went to C. A. Trueman, Ottawa, Kans. \$500 was paid for Montgomery Ward 35435, sired by Pilatus 2:09 1/4, which went to B. Hochensmith, Abilene, Kansas.

A chestnut stallion colt sired by Es-

cob sold for \$400 to J. B. Case, of Abilene.

The principal buyers of the sale were as follows: E. Hochensmith, Abilene; C. Q. Furnass, Ottawa; H. M. Cotten, Leon; J. B. Case, Abilene; Geo. Etherington, Abilene; C. F. Estes, Abilene; F. M. Robinson, Solomon; H. E. Bacon, Herington; S. P. Cookson, Junction; Dave Nail, Herington; Jacob Snyder, Abilene; A. B. Robbins, Abilene; G. S. Hoffman, Abilene; R. T. Rindt, Woodbine; R. Hollingsworth, Solomon; Theo. Sanderst, Enterprise; Allen Moyett, Herington; G. W. Nave, Herington; Fred Sanghoover, Herington; Dr. Conklin, Abilene; Henry Keel, Abilene; Henry Shaner, Herington; Jno. Pratt, Herington, Kans.

The New Home of Sutton's Doddies.

Mr. Chas. E. Sutton, who for many years has been prominent as a breeder of Aberdeen-Angus cattle and Berkshire swine at Russell, Kans., has lately moved his lares and penates to his farm near Lawrence, Kansas. Since this removal there has been no decrease in the demand for these "doddies." Sales lately made include 5 bulls to the Capital Syndicate of Texas; 1 to F. O. Cresswell of Texas; 1 to John Fitzpatrick of Texas; 3 to Dr. Garrett & Son of Wallace County, Kansas; 1 to John Meyer of Lincoln County, Kansas; 1 to Guy St. Aubyn of Russell County, Kansas, and an imported bull to H. A. Cole of Chicago. The latter sold for \$725. Sutton's blacks seem to spread out over the earth.

An Attractive Angus Auction.

Eight breeders of the "market takers" whose names will be found in the advertisement in this issue will unite in a combination auction at Kansas City on Tuesday, April 3, under the management of W. C. McGavock, of Springfield, Ill. T. J. McCreary, Highland, Kans., consigns seven head. The bull Black Knight of Highland 4th, a double Blackbird, has the distinction of being No. 1 of the catalogue. He was sired by Imp. Blackbird Baron of Advie, an Erica topped Blackbird, whose four grandsons and dams were bred by Sir George MacPherson Grant of Ballindalloch. Black Knight of Highland 4th was out of the double Blackbird cow, Blackbird of Highland 2d, and whose sire Black Knight of Estill 7th was a son of the great Heather Lad 2d, and whose dam Blackbird of Turlington 8th is the dam of Blackbird of Emerson the dam of the noted Blackbird bull, Black Monarch of Emerson. He is a bull of grand scale, and his pedigree is all that could be wished and, as he was a year old last September, he is just the age to do some breeding a lot of good. Another yearling son of Imp. Blackbird Baron of Advie, Mr. McCreary consigns in the Trojan-Erica, McCreary's Eric. He was out of a dam that traces maternally to Imp. Eone and was sired by the Abbess bull, Axtell of Estill. The dam of this bull is named Eona Mack and she is also included in the auction and due to calve before sale time to the service of the Blackbird bull. Three yearling queen mothers' daughters of this imported Blackbird bull are also catalogued by Mr. McCreary. They are good individually and their pedigrees are right. The outstanding Angus sire of to-day is Black Monarch of Emerson. A daughter of this bull was champion at the World's Fair, at St. Louis, and of the last two International Expositions, and as Black Monarch of Emerson died last year, his get are rendered all the more valuable and there are few of them to be offered at auction. R. S. Williams, Liberty, Mo., offers on this occasion a daughter of this celebrated bull in the four-year-old cow Miss Monarch Williams, and she was out of a daughter of Black Magic a full brother to Black Monk. Mr. Williams has sold at Kansas City, as many good cattle as have been presented there from the herd of any one Angus breeder. Last year at the show and

RUPTURE

New Scientific Appliance, Always a Perfect Fit—Adjustable to Any Size Person—Easy, Comfortable, Never Slips—No Obnoxious Springs or Pads—Costs Less Than Many Common Trusses—Made for Men, Women or Children.

Sent on Trial

I have invented a rupture appliance that I can safely say, by 30 years' experience in the rupture business, is the only one that will absolutely hold



C. E. Brooks, the Inventor.

The rupture and never slip and yet is light, cool, comfortable, conforms to every movement of the body without chafing or hurting and costs less than many ordinary trusses. There are no springs or hard lumpy pads and yet it holds the rupture safely and firmly without pain or inconvenience. I have put the price so low that any person, rich or poor, can buy, and I absolutely guarantee it.

I make it to your order—send it to you—wear it, and if it doesn't satisfy you send it back to me and I will refund your money.

That is the fairest proposition ever made by a rupture specialist. The banks or the postmaster here in Marshall will tell you that is the way I do business—always absolutely on the square.

If you have tried most everything else, come to me. Where others fail is where I have my greatest success. Write me to-day and I will send you my book on Rupture and its Cure, showing my appliance and giving you prices and names of people who have tried it and been cured. It is instant relief when all others fail. Remember I use no salves, no harness, no lies. Just a straight business deal at a reasonable price.

C. E. Brooks, 1630 Brooks Bldg., Marshall, Mich.

sale held there, he won the female championship and he this year offers a full sister and numerous daughters of her sire Zaire 17th, one of the best breeding bulls to be found in the country. The catalogue of this auction should prove interesting to all breeders and admirers of the Angus, and will be mailed on application to W. C. McGavock, sale manager, Springfield, Ill.

The Ashcroft Shorthorn Sale.

Perhaps the most attractive feature of the A. M. Ashcroft sale of Shorthorns which will be held at the home farm near Atchison, Kans., on April 10, will be the 27 solid, dark-red cows and heifers that will be offered safe in calf to their great herd bull, the pure Cruickshank Victoria, Scottish Minstrel 234970. This will be the only sale of the season, so far as we can learn, where such an array of good red cows will be offered that are bred to a pure Cruickshank bull.

The 15 bulls in this sale are as good as their sisters, and of the same solid colors. Five of these are large growthy chaps sired by Acomb Duke 18th who is well known as a breeder among Shorthorn men. The good bull, Harmony's Knight, is the sire of the ten younger bulls in the offering. He is also a Scotch bull and one of the best in Kansas. There will be free carriages at Carter's livery barn in Atchison ready to take buyers to and from the sale. Lunch will be served at noon and the sale will begin at 1:30 p. m. Remember the time and place and be there to get these cattle.

Do You Need a Bull?

If you are in need of a bull you should write Hoadeley & Sigmund, of Selden. They have only four bulls left and you can get them right. These gentlemen while new to Kansas people are old and experienced Shorthorn men, having started their herd eighteen years ago at Cedar Rapids, Iowa, and just recently moved it to Kansas. These gentlemen have spared neither time nor money in building up their herd. Much of their foundation stock was purchased from Secretary of Agriculture James Wilson when he dispersed his famous herd several years ago, and in the herd you will find animals from the famous families of Young Mary, White Rose, Pomona, Secret Arabella, Lady of Athol, Dalcibella, Young Phyllis, Wiley, etc., the get of some of the most noted sires in the West. The bulls they have left are either pure Scotch or Scotch tops, and range in age from eighteen to twenty-two months old. You can make no mistake by purchasing from them.

Southeast Kansas Breeders' Association Sale.

In the Shorthorn sale at Fredonia, Kansas, April 13, 1906, under the auspices of the Southeastern Kansas Breeders' Association, will be sold a number of pure Scotch cattle that will interest any of the best breeders of Shorthorns, in fact, all the offering are of breeding and merit that is desirable in any herd. Mr. Hanna, of Howard,



GOVERNOR 73392.

One of the great sons of Anxiety Monarch 63204. There will be sold at public auction on April 18, 1906, at Superior, Neb., about 50 head of choice Hereford cattle, consisting of cows sired by the great sire, Anxiety Monarch with calf at foot, and others in calf; also the blood of Ancient Britton and Vincent 2d 42942, both World's Fair winners in 1893; also sons of the great Beau Donald 28th 105168. Breeders of Hereford cattle this sale is worth your attention. For catalogue write W. N. Rogers, McCook, Neb.

Warranted
to give satisfaction.



GOMBault's CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.
Each bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

has imported more high class herd bulls than any other Western breeder and the cattle in this sale are largely by the great bulls he imported: Mariner, Collynie, Lord Cowslip, Inglewood and other great sires were bought in Scotland by Mr. Hanna and if it is said an animal is Hanna bred it is a guarantee of an individual of superior merit. Mr. Hanna has selected some excellent cattle for this sale as have the other consignors. Besides the animals by the Hanna bred or imported bulls will be some of Imported Choice Goods, Imp. Lillycrairn, Battle Ax, Golden Victor Jr., Scottish Emperor, etc.

The consignors have all been for months planning this sale and have reserved and fitted their consignments especially for this sale. If you have not yet received the catalogue, address H. E. Bachelder, secretary, at Fredonia, Kansas, or either of the consignors at their respective addresses, and kindly mention THE KANSAS FARMER.

The Johnson County Breeders' Association Sale.

The Johnson County Breeders' Association will hold a cattle sale at Olathe, Kansas, April 6, when they will sell 40 cattle, 32 Shorthorns and 8 Herefords, about equally divided as to bulls and females. Mr. Hayes, secretary of the association, has selected 6 head from his herd of good ones and the other consignors are all selling an excellent lot of useful, well-bred cattle. J. S. Fergus is selling his herd bull, Admiral, bred by E. O. Cowan and sired by Velvetine Prince. Also a 3-year-old heifer by the great Alice's Prince and a young Phyllis bull out of a Duncan bred cow. J. S. Hoover sells 3 cows and heifers tracing to Imp. Alexandria 6th, bred by W. S. Marr. Mr. Hayes sells a young Mary cow bred by C. C. Norton, of Iowa, close to calving, bred to Lord Bauff 2d, a son of Imp. Lord Bauff.

Two other good cows, one by Cherry Grand Duke 2nd with roan cow calf at foot by Lord Bauff 2nd. The other tracing to Imp. Adelaide with cow calf at foot by Royal 167522 a Crulckshank Victoria bred by Cal. Haines; a young easey cow, bred to Lord Bauff 2nd, is also included.

The Herefords are well-bred cattle, descendants of animals from the herds of some of the best Missouri breeders and have been selected for this sale by their owners, realizing that the good ones alone are wanted. Send at once for catalogue to H. E. Haynes, secretary, Olathe, Kansas. Kindly mention THE KANSAS FARMER.

Shorthorns at Atchison.

The uniformity of A. M. Ashcraft's sale offering of Shorthorns is noticed by all who have seen them. If you will notice the line of breeding that produced them, it will be found that they have descended from two imported families of Young Marys and Galatea and have all been sired by the herd bulls used in the herd. The cows and heifers are a very even, all-red lot and all in calf to the good son of Imp. Scotch Mist, Scottish Minstrel, a pure Scotch bull of great beef character. The hull portion of the offering consists of 15 head, 5 great big strong fellows ready for pasture or range use and the others are just about a year old of the blocky, easily-fleshed type so much in demand. If you have not yet received the catalogue, write a card to Mr. Ashcraft, Atchison, Kansas, asking for the same.

Howey's Public Sale.

On Wednesday, April 4, at his farm southeast of Topeka, Mr. V. B. Howey, will sell a draft from his herd of Poland-China swine. In this draft there will be included 13 head of herd sows and gilts. There will also be seven boars, two of which are his herd boars, Klondike Jr., 63129 and Proud Ryes Sunshine 63002. This will afford an excellent opportunity for buyers to get some of the stock which Mr. Howey has bred so long and so successfully. At the same time and place, Mr. Howey will sell 3 head of milk cows and 3 helpers that will be fresh in the summer; also a span of black horse-mules coming two year old. A number of agricultural implements, including a 3 horse-power gasoline engine, will also be sold. Remember the time and place

and meet Mr. Howey at his sale. One of Mrs. Howey's famous lunches will be given the buyers at the noon hour.

Gossip About Stock.

E. A. Kramer, of Plainville, Kans., is just starting in the hog business. He has gathered in several good sows and judging from the animals he has purchased, is an excellent judge of hogs, which is one of the necessary qualifications for a successful breeder. Mr. Kramer will have some good foundation stock to offer the public this fall.

C. G. Cochran and Sons, of Plainville, Kans., are starting a fine herd of Short-horns. We bespeak for these gentlemen a successful business. Mr. C. G. Cochran is president of the First National bank of Plainville and one of the successful business men of Western Kansas.

N. F. Shaw, of Plainville, Kans., has what is said by judges of good cattle to be one of the best herds of Short-horns in Kansas. Mr. Shaw has recently headed his herd with a son of Gallant Knight, which he purchased from T. K. Tomson & Sons, Dover, Kans.

Saunders & Maggard, of Flemingsburg, Ky., have recently shipped to Salina a carload of Kentucky Jacks, where they will be sold at private sale. If you need an animal of this kind it will pay you to see these Jacks. They are the large, heavy-boned individuals, and good breeders. No one can make any mistake by purchasing a jack at this time. The demand for mules is far greater than the supply and they are bringing high prices. If you will buy a good jack such as these gentlemen have, you will have no trouble in getting all the work he can do. Go to Salina and see them. Saunders & Maggard.

Wilkie Blair, owner of the Beulah Land Farm Herd of Red Polled cattle, writes as follows: "My ad. in the KANSAS FARMER has brought me many inquiries for Red Polled cattle. One man wants a carload of bulls. I have recently made the following sales: Two-year-old cow to S. V. Mulkey, Waynoka, Okla.; yearling heifer to W. J. Johnson, Hiattville, Kans.; bull calf to Chas. Puterbaugh, Iroquois, S. D. I have three choice bulls nearing a year old for sale, and some younger ones which will make herd-headers, out of cows winning at the St. Louis World's Fair, and sired by our herd bull, Linwood Lad 9492—K. 25, who won 2d in class at 2-year-old, and at head of aged herd, winning 3d at World's Fair, his sire being the famous Majololini 3600—L. 9, who won the Royal championship two years in succession. These young fellows are the best ever bred at Beulahland."

G. E. Newton is the successor to the firm of Newton Bros., Whiting, Jackson County, Kansas, which partnership was dissolved on March 8, 1906. Mr. G. E. Newton, who has been the active and responsible member of the firm, makes the following statements: "In order that all who may be interested may understand exactly, I will give a brief history of the herd and myself. I was born in Illinois, but I have lived in Kansas 33 years. Ever since I was 12 years old I have owned and fed stock (cattle and hogs). I have been manager for the herd since it was established; I did all the buying and selling. The breeding and feeding was also done under my direct supervision, when I did not do it in person. My brother and past partner did not take to the occupation and desired to try other business, hence our separation. The herd of hogs was established February 10, 1898. Two years later my brother came in with me. The E. P. Rocks was added in 1899. We always carried a herd of choice high-grade Shorthorn cattle, but in October, 1904, we sold these cattle and I invested personally in some choice registered Shorthorn cattle. Previous to 1898 I handled Poland-China swine for six years. From 1898 up to date I have personally sold over 1,400 head of Durocs for breeding purposes, besides all culs that went to market."

We wish to thank all our customers for favors and courtesies extended to the firm of Newton Brothers, and will say that all who do business with me in the future will deal just as they did when we were in partnership, as I was the one you all bought or sold to. If square dealing will merit your patronage and friendship, I shall be confident of your business and friendship in the future. Address all letters or cards in the future to G. E. Newton, Whiting, Kans., Route No. 1.

The Farmer and the Hen.

Census reports show that 88½ per cent of American farmers keep poultry. Why the other 11½ per cent don't is something of a puzzle, because the farmer usually has an eye to the main chance. Every man with an acre of ground at his disposal ought to get ready for the coming boom in the poultry business. Demand is constantly forcing increased production, and it is no exaggeration to say that the value of poultry products in the United States will soon pass the three hundred million mark. If this is so, why not learn the secret of poultry success, and get your share of profit? It is a fact worth noting that successful poultrymen always give their laying stock a daily dose of Dr. Hess Poultry Pan-a-ce-a in the feed. They would tell you that this is almost as necessary as the feed itself, and back their contention with abundant proof in the way of results. This method has reason and common sense back of it, because it is impossible for the hen in confinement to get the elements Nature intended for growth maintenance, and egg-production, and even when at liberty she still needs the correcting and invigorating influence of such a tonic.

Dr. Hess Poultry Pan-a-ce-a meets this need by supplying iron to the blood, and nitrates to help Nature in

throwing off all poisonous substances. You can readily see if these necessary elements are given, the hen must be healthy and prolific. Experience has proved again and again that no flock can be diseased when Dr. Hess Poultry Pan-a-ce-a is given as directed. A very little once a day in soft feed, compels the hen to fully digest her food, and use each part in just the way Nature intended, so that bone, flesh, feathers and eggs are each provided for in a healthy and natural manner without taxing the vitality of the hen.

For these reasons Poultry Pan-a-ce-a (prepared by Drs. Hess and Clark, of Ashland, Ohio) is a guaranteed egg-producer. A careful test will prove its value. Separate a few hens for two weeks' time and give them Dr. Hess Poultry Pan-a-ce-a as directed. Compare this performance with that of an equal number of hens which have none of this preparation, for the same period, and you will have no doubts of its value as an egg-producer. Drs. Hess and Clark are so sure of the remarkable results to be had from the use of Poultry Pan-a-ce-a that they give a written guarantee with every package. If it does not pay you several times its cost, they cheerfully return your money. If you are in the poultry business for profit you can not afford to get along without Dr. Hess Poultry Pan-a-ce-a. Use it every day, and occasionally sprinkle hens, nests, and roosts with Instant Louse Killer, if you want results.

"It Makes Stock Thrive."

And that's what you want—thrifty stock, for "Thrifty stock makes a thrifty farmer." Standard Stock Food has been used by hundreds of thousands of farmers for more than twenty years to improve the appetite and promote the digestion of all live stock. It makes the feeding ration more palatable, improves the appetite, stimulates the flow of all digestive juices—enabling the animal to get more good from the ration, and making the ration go farther. Many of our readers are now using it with most satisfactory results; they prefer the standard—not only because it does the work so well, but also because of its economy; a dollar's worth of it contains more feeds than a dollar's worth of any other. Better results for less money. If you are not using the Standard, ask your dealer about it. If he does not handle it, send his name to the Standard Stock Food Co., 1500 Howard St., Omaha, Neb., and tell how much stock you keep, and the manufacturers will send you their 160-page book, "The Standard Feeder," full of practical, every-day suggestions for making more money from your stock of all kinds.

P. R. Coseman, Newark, N. J., writes: "If I had known of Dr. Sloan's Nerve and Bone Liniment previous to August 29, I should not have passed so many sleepless nights. On that date I slipped from a step-ladder and bruised my left arm and shoulder. The doctor assured me that no bones were broken, but that the muscles and nerves were strained, which in his opinion was worse than a break. After using several dollars' worth of prescriptions, without any result whatever, I concluded that I should always be a cripple. On December 12, I stepped into a drug store and got a 25 cent bottle of Sloan's Liniment, and the instant that I applied it as per directions, I got relief; in fact it acted like magic. I have now only used it seven days and my arm is almost well. The liniment can not be too highly recommended, and I shall make it a point to solicit the trade to keep it whenever I can do so."

Topeka Business College News Items

New Term begins April 2, 1906.

Nine students went from school into positions last week.

Students from this school took positions in fifteen States and three Territories last year.

In addition to placing all graduates the school also placed in positions the past year ninety-four students who had not yet completed the course.

O. D. Wilkerson, of Washington, D. C., is visiting in Topeka. Mr. Wilkerson is a fluster and has made steady advancement in the civil service since completing his course at T. B. C.

Chas. Fleisch, the youngest graduate of this school, was among the visitors recently. Charlie now has a position with the Colorado Iron and Fuel Co., at Pueblo, Colorado, at \$1,800 per year.

Mr. Edward Bartel, who, after leaving school had considerable experience as stenographer in the City of Mexico, and Central America, is now located at Mansfield, La. Ed's visit last Friday was much appreciated. He always has a lot of interesting things to tell.

Students who took positions last week:

Miss Lillian May, Bookkeeper, with Ewart Lumber Co.

Miss Anna Tucker, Stenographer, with Hypes Supply Co.

Mr. O. Ritchie, Stenographer, with Mall and Breeze.

Mr. Carl Blecha, Stenographer, with Topeka Bridge & Iron Co.

Mr. Arch Brunton, Stenographer, Rock Island Offices.

Mr. W. Wallace, Stenographer, A. T. & S. F. General Offices.

Miss Bertha Louis, Telegrapher, Postal Telegraph Co.

Mr. Clarence Dreyer, Telegrapher, Postal Tel. Co.

Mr. Geo. McCleery, Telegrapher, Santa Fe at McIver, Kans.

When writing advertisers, please mention this paper.

I CAN CURE CANCER

At Home Without Pain, Plaster or Operation and I Tell You How, Free.



I Have Proven Cancer Can be Cured at Home No Pain, No Plaster, No Knife---Dr. Wells

I have discovered a new and seemingly unfailing cure for the deadly cancer. I have made some most astonishing cures. I believe every person with cancer should know of this marvelous medicine and its wonderful cures and I will be glad to give full information free to all who write me tell me about their case.

Peter Keagan, Galesburg, Ill., had cancer of the mouth and throat. Doctors said, "no hope." Mr. Keagan wrote: "It is only a question of a short time—I must die." To-day his cancer is healed up and he is well. My marvelous raditiatived fluid did it. It has other just such cures to its credit. It is saving people every day and restoring them to health and strength. If you have cancer or any lump or sore that you believe is cancer, write to-day and learn how others have been cured quickly and safely and at very small expense. No matter what your condition may be do not hesitate and tell me about it. I will answer your letter promptly, giving you absolutely free, full information and proof of many remarkable cures. Address, Dr. Rupert Wells, 1251 Granite Bldg., St. Louis, Mo.

You Must Sleep.

If you cannot, it is due to an irritated or congested state of the brain, which will soon develop into nervous prostration.

Nature demands sleep, and it is as important as food; it is a part of her building and sustaining process. This period of unconsciousness relaxes the mental and physical strain, and allows nature to restore exhausted vitality.

Dr. Miles' Nervine brings refreshing sleep, because it soothes the irritation and removes the congestion.

It is also a nerve builder; it nourishes and strengthens every nerve in your body, and creates energy in all the organs.

Nothing will give strength and vitality as surely and quickly as Dr. Miles' Nervine.

"During the past winter I had two attacks of LaGrippe which left me very weak, and in bad condition. I was so nervous I could not sleep. My wife, after trying different remedies, went for a doctor. The doctor was out, and a neighbor recommended Dr. Miles' Nervine, and she brought home a bottle. I had not slept for some time, and had terrible pains in my head. After taking a few doses of Nervine the pain was not so severe, and I slept. I am now taking the second bottle, and am very much improved." HENRY M. SMITH, Underhill, Vt.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

Sheridan County Land

ARE YOU LOOKING FOR LAND? DO YOU WANT A HOME?

In the great wheat and corn belt of Kansas where land sells from \$10.00 to \$25.00 per acre. If so, write us your wants.

All communications promptly answered.

WRITER.

TRIMBLE & TRIMBLE, Belden, Kans.

Miscellany

Remarks About Birds in Regard to Fruit and Insects.

BY ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

Much argument has been spent in advocating the protection of song-birds for the service they bestow in feeding extensively on insects largely injurious, but the fact remains that their depredations to many kinds of fruit, when it becomes ripe, presents a serious side to the subject. Since my article entitled "The Destruction of Fruit by Birds in Sedgwick County," was published in the KANSAS FARMER of November 20, 1902, I have been anxious to learn what tendencies are exerted by birds in their relations to fruit and insects in other parts of Kansas and in other States, particularly of the West, and have accumulated various short references, which being reproduced here, contribute to a further consideration of the question through expressions of the views of other observers in addition to my own remarks. A notice that has evoked my attention at this time appeared in the Lawrence World of December 20, 1905, and read to this effect:

"The following press dispatch, dated at Champagne, Ill., appeared in a morning paper: 'Because the students of the Kansas University, at Lawrence, hunted and killed birds that ate insects, and robbed their nests in pursuing their studies, that section of Kansas has not had an apple crop for six years,' was the statement of B. F. Smith, of Lawrence, before the Illinois State Horticultural meeting held in this city. Not all the damage was done by the students; other boys and hunters helped to exterminate the bug-eating, winged creatures until the State, at the last session of the legislature, passed a law prohibiting hunting without permission of the landowners."

The charge against the students of the University, at least as applying to recent years, was, however, emphatically denied by Professor L. L. Dyche, curator of the bird collections.

To prove that birds have been plentiful in Douglas County, if not too much so, even within the period mentioned, a complaint of their destruction of fruit which came to notice in the Lawrence Journal of June 26, 1903, is here produced:

"Mr. Greenlees, southeast of town, who has a large amount of berries, says that flocks of blackbirds are taking his berries as fast almost as they ripen. This is not a new complaint, for the blackbirds is sometimes almost as great a nuisance as the English sparrow."

In making direct inquiry to the source of this report, I received this answer: "Your card of inquiry about the blackbirds is received. In reply will say they helped themselves quite freely to my raspberries for a short time and then left as suddenly as they came. The loss was trifling and not worth reporting. Yours respectfully,

"A. GREENLEES."

As the extent of land now covered with trees and shrubs is much greater than in former years with respect to Douglas County as well as elsewhere in the State, the spread of arboreal influences would indicate that birds should be more numerous than ever known before; as least, such has been the case in Central and Western Kansas. The amount of loss inflicted on fruit by birds depends on local conditions to a great degree. On the prairies, wild fruit is seldom found, hence the birds are greedily attracted by cultivated varieties. Their attacks on grapes raised in this region are especially severe. Each year only brings a repetition of their plunders in the same manner as described in my former article treating of observations in Sedgwick County. During the last few seasons, however, the yield of grapes has been slight, but whatever there was, the birds got the most of it when not protected. Here the fruit-grower can not afford to bear the loss of a considerable portion, or perhaps the greater part of his crop, out of pure sentiment for the birds.

Wholesale slaughter may seem to be a terrible recourse to enforce against the birds, but either the birds must be subdued or the growing of certain fruits abandoned in those sections. Possibly a remedy or mitigation for the trouble may be provided in time by the raising of mulberries or something else to satisfy the bird-appetite, but it can not be for present purposes. While the amount consumed by a single bird is

trifling, the extent of all losses incurred results from the combined attacks of a great number of one or more kinds. Examinations of the stomach contents of birds accused of marauding in orchards and vineyards have failed to show that they eat scarcely more than perceptible amounts of fruit in proportion to other food. However, birds are sometimes the means of destroying far more than they actually eat. The slight evidences of either fruit or its seeds being found in the stomachs of those examined does not by any means indicate the wanton tendency exerted in their attacks upon grapes, or, if such evidence be entirely lacking, should they be considered innocent of doing any damage at all, when instead, as I shall show, they can be guilty of causing extreme havoc. Why these investigations fail to sustain the condemnatory charges against the birds is, in my opinion, because the birds do not eat grapes, unless rarely; they merely take a sup or two of juice from each berry which is ripped open, one after another, in rapid succession, thereby ruining whole bunches. All they generally swallow, then, is a little juice. My conclusions to this effect are based on frequent observations of birds while attacking grapes on the vine. Besides the wrecked bunches tell the story plainly enough. Regarding this trait, I have found no mention in reports of Government investigators or otherwise, though the advisability of having ponds or other supply of water available to birds in hot, dry weather, has been suggested. Perhaps this is a matter of thirst rather than appetite.

Judging from the experience of a lady living at Kinsley, Kansas, the prospect of growing grapes to maturity that far West appears practically hopeless. Some grape-vines had been trained on a trellis in the yard near her house, and they bore abundant fruit, but she never succeeded in saving any from the birds unless she picked the grapes before they fully ripened. One year the lady tied strong paper sacks over the bunches just before the time of ripening; yet the birds soon ripped them open with their beaks and riddled the fruit. Next year she provided bags made from a strong quality of cheese-cloth in the belief that the birds would surely be unable to penetrate a covering of this strength; how keenly her disappointment was felt, when, after all her trouble, she found that the birds actually forced holes into these bags with their bills and thus managed to reach and spoil the fruit within!

As evidence of how the matter is regarded by other observers, two of whom are experienced specialists in the study of birds, their comments on my former article, including suggestions for remedial measures, should show for themselves, although this will require the reprinting of all except the communication of Professor Bruner which has not been published before. His letter was written from the Department of Entomology and Ornithology of the University of Nebraska, at Lincoln, under date of December 15, 1903, and from which his words are quoted:

"Allow me to thank you for the paper on the destruction of fruit by birds in Sedgwick County, which you have so kindly sent me.

"I, myself have never seen anything to begin to compare with it on the prairies of Nebraska and I have watched birds a great deal for the past twenty-five or thirty years."

"In my talks concerning bird-protection, I suggest the planting of the Russian mulberry and other wild fruits which birds are fond of, since I have observed that wherever they have access to wild fruits they seldom pay any attention, or at least very little, to the cultivated varieties. Then, too, the placing of water where the birds can have access to it seems to assist in quenching their thirst during the hot days of late summer and early fall.

"Yours very truly,

"LAWRENCE BRUNER."

The following letter was printed in the KANSAS FARMER of January 29, 1903, under the heading, "Birds and Orchards."

"Mr. E. S. Tucker, Kansas State University, Lawrence, Kans., writes as follows:

"In referring my article published in the KANSAS FARMER of November 20, 1902, to the U. S. Department of Agriculture, the following reply has been received, which I submit for the benefit of your readers:

"U. S. Department of Agriculture, Biological Survey, Washington, D. C. E. S. Tucker, Lawrence, Kans.

"Dear Sir:—Your favor of the 6th instant, and the article on "The Destruction of Fruit by Birds in Sedgwick County," has been referred to me for

consideration. If you will turn to page 33 of bulletin 54, "Some Common Birds in their Relation to Agriculture," U. S. Department of Agriculture, you will find that I have there described in general terms the situation of which you have given a specific example. The conditions are artificial and abnormal in every respect. When, in addition to the orchards and vineyards, artificial forests, with their accompanying fruit-bearing shrubs, shall have grown, the present trouble will practically cease. In the meantime I do not see that there is any other remedy than the one that was applied, much as I deplore such destruction of bird-life. Too many birds were collected in a limited area with the usual result. It is evident that the killing did some good as the birds were less destructive last season.

"The fruit-growers of California have been for several years struggling with the same problem but the conditions are slowly becoming more normal, in fact so much fruit is raised there that it is only in small orchards that the damage by birds is noticed.

"As I have stated elsewhere, the damage by birds usually arises from too many birds, or too many of one or a few species, collecting in a limited area. Under such circumstances the natural food-supply becomes insufficient and the birds turn their attention to other sources of supply with the consequence, usually, that some agricultural product has to suffer.

"I send herewith a copy of bulletin 54, also "How Birds Affect the Orchard," which shows the other side of the case.

F. E. L. BEAL.

"In charge Economic Ornithology."

Under the heading, "Birds and Grapes in McPherson County," the following statement appeared in the KANSAS FARMER, issue of December 4, 1902:

"EDITOR KANSAS FARMER:—I was much interested in reading an article written by E. S. Tucker, in the issue of November 20. I give my experience with fruit and birds here in McPherson County. I have been here thirty years. I find that grapes are the surest fruit we can raise. They bear every year, but I do not expect any unless I stand over them with a shot gun from the time they begin to color until they are all gone and we have to gather them before they are ripe to get any at all, because I can not watch them all the time. I will have to give up grapes unless the brown-thrushes, catbirds, and orioles are killed off. We have not many robins or mocking-birds. The orioles are the most numerous and worst.

B. REICHART.

"McPherson, Kans."

Another statement from the same person appeared just recently (in issue of February 22, 1906 KANSAS FARMER,), under the heading, "Fox Squirrels—Birds and Fruit," which presents the situation up to date:

"EDITOR KANSAS FARMER:—We have plenty of what they call fox-squirrels here. They are great on sweet corn when in the roasting-ear stage; they also help themselves to corn in the crib and take care of all the walnuts.

"We also have many fruit-eating birds. They will not let a cherry or grape get ripe if they can help it. We have a good many rats here. I would rather feed rats on corn than feed birds on fruit. Now, if one is protected by law, why not protect all three, for one is as good as the other as far as usefulness is concerned. Our apples are nearly all wormy in spite of all the birds that are here. Do we not have a right to protect our crops, law or no law?

B. REICHART.

"McPherson County."

Then again in the next issue of the KANSAS FARMER (March 1), there appeared an inquiry from a correspondent in Montgomery County, who, in asking how to prevent loss of seed-corn caused by birds and other animals, intimates that birds are serious offenders in this respect.

My own contentions with birds began when I was a boy on an Ohio farm, where, in cherry time, I was sent out with an army musket and a supply of powder and shot with which to shoot the birds that came to eat the fruit. A few shots with the old gun that "kicked" at every discharge was generally sufficient to appease even a boy's ardor for shooting, and further watchfulness was induced more by the prospect of a feast on savory bird-pie to be made by grandmother should enough birds be killed, rather than for the sake of saving the cherries. Out in Kansas, however, where cherry-trees were grown after years of waiting, and the yield at first was scant as could only be expected from young trees, the persistent raids of the birds, which scarcely left any fruit long enough to become ripe, was indeed discouraging.

An opinion frequently advanced by

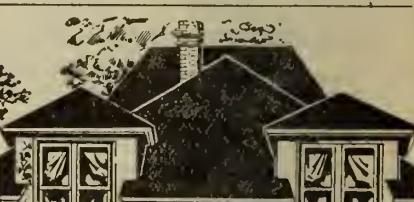


Kill your ducks—

don't cripple them. Shoot U. M. C. duck shells—not others almost as good. Arrows or Nitro Clubs loaded with any smokeless powder are hard hitters.

U. M. C. cartridges are guaranteed, also standard among when U. M. C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.
Agency: 313 Broadway, New York



BETTER-CHEAPER ROOFING

Have you ever paid a high price for roofing and then had it leak within a year or two? There is *only one* way you can prevent this from occurring again—by buying a roofing that is *made right*; one in which materials are used that will not rust or decay. Therefore no leaks.

Mica-Noid
READY ROOFING

is a long wool fibre thoroughly saturated with a water-proof preparation by our own "damp-proof" process, which years of test in all climates have proved will resist water and decay. We want you to know why users of Mica-Noid prefer it to tin, shingles, iron or any kind of roof material.

We want to send you copies of letters from these users; also FREE samples of roofing. They speak for themselves.

ASBESTOS MFG. & ROOFING CO.,
306 Carr Street, St. Louis.



CONGO ROOFING

A ready roofing that is warm, dry, easy to lay and lasting.

In appearance it looks like rubber and it is as water-tight as rubber—but there is where the resemblance ceases.

Its wearing qualities are unsurpassed—it is a splendid fire resistant—acids and alkalis have no effect upon it. It doesn't rot out nor crack. It is pliable and elastic to the end of its days.

Good for any climate, any weather, anywhere on earth.

Write for free Sample and Booklet to-day.

BUCHANAN-FOSTER COMPANY
448 Chestnut Street, Philadelphia, Pa.



New way to smoke meat in a few hours with KRAUSER'S LIQUID EXTRACT OF SMOKE
Made from hickory wood. Delicious flavor
Cleaner, cheaper. No smokehouse needed. Send
for circular. E. KRAUSER & CO., Milton, Pa.

WELL DRILLING MACHINES

Over 50 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$2.50. Address,

THE KANSAS FARMER CO.,
Topeka, Kan.

Inexperienced persons is that if some object of dread to the birds were placed in a tree, the birds would be afraid to alight there. But that "something" possessing any merit for protective effect has never been found; instead, anything unusual attracts more birds than common, at least as far as a trial of old or stuffed clothes has proved; and furthermore, the humorous experience of John Burroughs as told in his book, "Birds and Bees and Other Studies in Nature," is repeated here to show the fallacy of such notions.

"One season, to protect my early cherries, I placed a large stuffed owl amid the branches of the tree. Such a racket as there instantly began about my grounds is not pleasant to think upon! The orioles and robins fairly shrieked out their affright. The news instantly spread in every direction, and apparently every bird in town came to see that owl in the cherry-tree, and every bird took a cherry, so that I lost more fruit than if I had left the owl indoors. With craning necks and horrified looks the birds alighted upon the branches, and between their screams would snatch off a cherry, as if the act was some relief to their outraged feelings."

Mr. Burroughs' writings on birds, particularly his chapters on "Bird Enemies," and "The Tragedies of the Nests," in the book just mentioned, tend much to incite the sympathy of the reader for these creatures of precarious lives. Yet in Kansas, as in other parts of the West, there are fewer enemies to prey on the birds and their eggs than in the East under such conditions as Burroughs observed. On this account they are more successful in breeding here. All of the writings of Mr. Burroughs furnish wholesome reading, but his choicest papers, probably, are contained in the volume, "Birds and Bees and Other Studies in Nature." There are two editions of the book, one in half-leather binding at 60 cents per copy, the other in linen covers at 40 cents. Besides his paper entitled "Sharp Eyes," an essay on how to observe things in Nature, the author not only touches on birds and bees in this work, but extols the potency of fruit and flowers, and of streams, meadows and woodlands with such charm as to captivate the heart of any true lover of Nature; or perchance, the reader is reminded of familiar scenes or out-door pleasures, possibly of childhood days, with a homesick feeling. Still, after all, we who live in Kansas need not lack for natural sources of enjoyment, though they may not be just the same as portrayed by Mr. Burroughs; we have plenty to rejoice in and would not exchange places.

Trade of the United States with Europe.

Europe takes two-thirds of the exports of the United States and supplies practically one-half of the imports. This statement summarizes in a single sentence the general facts which have been developed by a series of discussions of the trade of the United States with the countries of Europe recently presented by the Department of Commerce and Labor through its Bureau of Statistics.

These discussions have presented an analysis of the trade with each country of Europe by principal articles, and when summarized show that Europe takes more than a billion dollars' worth of the exports from the United States, while all other parts of the world takes a little less than a half billion dollars' worth. In no year since 1899 have the value of exports to Europe fallen below \$1,000,000,000, while that to all other countries has never touched the \$500,000,000 mark. Prior to 1900 the exports to Europe had never been as much as \$1,000,000,000 in value; in that year they crossed the billion-dollar line, being \$1,040,000,000, and have since that time averaged about \$1,050,000,000 per annum. In 1900 the exports to all sections of the world other than Europe were \$254,000,000 in value, but have grown year by year until in 1905 they were \$498,000,000, the growth since 1900 in exports to the non-European countries having been proportionately greater than that to Europe.

On the import side Europe supplies, as already indicated, about one-half of the merchandise brought into the United States. Prior to 1890 the share of the imports drawn from Europe averaged about 55 per cent; about 1890 the average was a little more than 50 per cent; in 1905 it was 48.4 per cent. This reduction in the percentage of the imports drawn from Europe is apparently accounted for by the growing demand in the United States for tropical and subtropical products which are supplied almost exclusively by the other grand divisions of the world. The value of

tropical and subtropical products brought into the United States in 1905 was \$508,000,000, against \$303,000,000 in 1895 and \$218,000,000 in 1885. Most of this class of imports comes, of course, from the non-European sections of the world; much of it from South America, especially coffee and India rubber; much of it from the southern part of North America, especially sugar, sisal, and tropical fruits; a considerable part from Asia, including tea, raw silk, and spices, while Oceania contributes sugar, spicess, cocoa, and other products of this character, and Africa Egyptian cotton, India rubber, hides and skins, and a small supply of sugar.

The trade of the United States with Europe is composed on the import side chiefly of manufactures and materials for use in manufacturing; on the export side of food stuffs, manufacturers' materials, and manufactures. The manufactures imported from Europe are chiefly the higher grades of cotton, silk, and wool fabrics into which labor, and in many cases hand labor, largely enters; while chemicals, certain grades of iron and steel manufactures, toys, wines, china and porcelains, cut- and plate-glass, and other articles of this kind contribute largely to the grand total. In addition to this, however, there are imported from the European countries certain articles the product of their respective colonial possessions, including India rubber, fibers, tobacco, hides and skins, wools, tin, raw silk, diamonds, and various tropical and subtropical productions. The articles exported to Europe are chiefly breadstuffs, meats, and live cattle, and fruits, for food; raw cotton for use in manufacturing, and a variety of manufactures, including copper in pigs, bars, and ingots, mineral oil, agricultural implements, boots and shoes, manufactures of wood, oil-cake, cottonseed oil, vegetable oils, naval stores, and various manufactures of iron and steel.

Of the \$1,021,000,000' worth of merchandise sent to Europe in 1905, 239,000,000 was manufactures, the other \$782,000,000' worth being largely food-stuffs and manufacturers' materials. With the growing tendency of our steadily increasing population to consume at home a larger share of the foodstuffs produced in the United States, and to increase the consumption by our own factories, the supply which can be spared for Europe is decreasing rather than increasing, and as a consequence the percentage of exports sent to Europe is slowly decreasing.

Prior to 1887 the share of our total exports sent to Europe was over 80 per cent; since that time the percentage has gradually fallen until it reached 72 per cent in 1902, and in 1905 was but 67.23 per cent of the total, while the share of the exports taken by those grand divisions to which the exports are chiefly manufactures shows an increased percentage in 1905 compared with 1904.

The fourth annual meeting of the Kansas City Alumni Association of the Kansas State Agricultural College, was held in the Pepper Building Friday night. The president of the college, Prof. E. R. Nichols, made the first short talk of the evening. He was followed by the following alumni: C. V. Hollister, '95, Rosedale; J. R. Harrison, '88, and B. L. Short, '82, Kansas City, Kans.; and Dr. A. T. Kinsley, '99, Kansas City, Mo. The speeches preceded a buffet luncheon. It is the hope of the association to hold more frequent meetings than it has in the past and to have some special feature for each meeting. About eighty graduates and former students were present. B. L. Short, '82, of Kansas City, Kans., was elected president; Miss Bertha Bacheller, '88, vice-president; and Dr. Geo. W. Smith, '93, secretary and treasurer. The Industrialist.

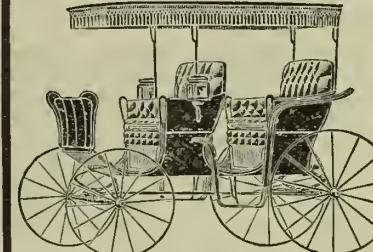
The zoological and animal husbandry departments of the Kansas Agricultural College, recently secured thirty Oregon pheasants from the State Game Warden at Pratt, Kans. The birds are for experimental work, and if the departments are successful in raising them, the birds will probably be liberated on the college farm. The State Game Warden is endeavoring to introduce the pheasants into Kansas and is interesting parties in the raising of them in the hopes of, in time, stocking Kansas woods with the birds. Industrialist.

Sin and happiness certainly do not travel on the same car, for they are not journeying on the same road.—N. Y. Observer.

Avoid dangerous topics if you would have others think well of you.



33 Years Selling Direct



No. 309. Canopy Top Surrey. Price complete \$83. As good as sells for \$85 more.

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality, and price.

We are the Largest Manufacturers in the World

Selling direct to the consumer exclusively. We make 200 styles of Vehicles, 65 styles of Harness. Send for large free catalog.



No. 721-1/2. Driving Wagon with Large Phaeton Style Seat and 1-1/4 in. Cushion tires. Price complete, \$65.50. As good as sells for \$25 more.

ELKHART CARRIAGE & HARNESS MFG. CO., Elkhart, Indiana.

The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

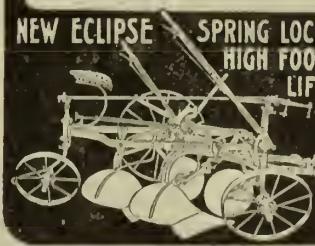
The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 356 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1310 West 13th Street. - - - KANSAS CITY, MISSOURI

Before Buying a Plow

Send for the book on Money Making Methods in Soil Cultivation. It is a complete guide as to how to prepare your acres to get bigger crops and what style of implements to use under certain conditions of soil. Then when you have learned what would be the best plow for you to use, INVESTIGATE THE



Fuller & Johnson Line

Walking Plows, Sulky and Gang Plows, Harrows, Planters, Cultivators, Transplanter, Manure Turner, etc. All styles in these machines and all possessing the Fuller & Johnson Standard Quality. Plows with extra hardened highly polished steel mould boards. That scour in any soil. Spring lock to steady plow in furrow. High and easy foot lift, strong, durable wheels. Get the book first and then decide. Address

FULLER & JOHNSON MFG. CO., 119 Dickinson St., Madison, Wis.



Save Your Clothes By Washing Them in A Gee-Whizz Washer

SENT ON FREE TRIAL

It would surprise you to know how much wear and injury clothes receive when washed by rubbing between rollers or bevy lids, jerked around by pegs, or in fact by any friction method.

Now of this in the Gee-Whizz as it washes by driving hot soap-suds through the clothing with force and speed, by means of water wheels. No friction on the clothes. Guaranteed to wash perfectly clean in from four to seven minutes.

Galvanized steel body. No warping and no falling apart. Adjustable to wash anything from a napkin to a quilt, or a length of carpet.

Write at once for full particulars and free trial proposition.

Gee-Whizz Mfg. Co., Walker St., Des Moines, Iowa

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40

Made of the best Soil Contor Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for Extra Share \$1.75 plus free catalogue of Riding Plows, Disc Harrows, Listers, Cultivators, everything to the Implement Line; Buggies, Wagons, Harness, Steel Ranges, Sewing Machines, and a thousand other things sold to you direct at wholesale prices. Write now and get ready for spring work.

12 in. Hard Steel Caster-Caster
With Plow \$1.20 HARPOOD PLOW CO., 77 Front St., Alton, Ill.
18 in. 1.50 The only PLOW factory in the United States selling direct to the farmer

Home Departments

CONDUCTED BY RUTH COWGILL.

Twenty Years Ago.

I've wandered in the village, Tom, I've sat beneath the tree,
Upon the schoolhouse playground that sheltered you and me;
But none were left to greet me, Tom;
and few were left to know,
Who played with us upon the green,
some twenty years ago.

The grass is just as green, Tom; bare-footed boys at play
Were sporting just as we did then,
with spirits just as gay;
But the "master" sleeps upon the hill,
which, coated o'er with snow,
Afforded us a sliding place, some twenty years ago.

The old schoolhouse is altered now;
the benches are replaced
By new ones, very like the same our penknives once defaced,
But the same old bricks are in the wall, the bell swings to and fro;
It's music just the same, dear Tom,
'twas twenty years ago.

The boys were playing some old game,
beneath that same old tree;
I have forgot the name just now,—
you've played the same with me,
On that same spot; 'twas played with
knives, by throwing so and so;
The loser had a task to do,—there,
twenty years ago.

The river's running just as still; the willows on its side
Are larger than they were, Tom; the stream appears less wide;
But the grapevine swing is ruined now, where once we played the beau,
And swung our sweethearts.—pretty girls,—just twenty years ago.

The Right One.

FLORENCE SHAW KELLOGG.

How well I remember it—that bright June morning away in Southern Virginia, in the new home where we had set up our household gods—coming hither from the dear old hills of Chautauqua County, New York, in the hope of prolonging the life of the little mother who was so precious to us all. One of the

"Standing with reluctant feet
Where the brook and river meet,
Womanhood and girlhood sweet,"

and who made home so good and beautiful to us we would fain keep her with us as long as possible. Our hope, thank God! was realized; for breathing the balmy air, laden with the breath of the pine-trees, brought healing to her lungs and she tarried with us for many a long, glad year in the home where "with a world of strife shut out, a world of love shut in" she led us on and taught us ever of the deep things of life, the holiness of love and service—not by words so much as by example. From her, and the noble father as well, we learned the sweet, dear habit of living together in such a way as to draw out and strengthen the best in each of us. Oh, mother! mother! where amid the beautiful fields of Paradise is thy home to-day? Wherever it may be, we can only think of thee as still living and working in the old familiar ways, and we wonder have the angels yet taught thee the depth and sweetness of thy womanhood? Hast thou yet learned how beautiful thou art, how deeply potent for good thy gracious life and ministry ever was? She was so unconscious of it all here—that dear little mother of mine. There seemed no self in her thought of life, so fully, so freely did she give her all to others, all unconscious of the truth and beauty of her character or how like an angel she seemed to us in her sweet love and patience. As unconsciously as the violets give of their perfume, she gave herself, nor knew more than did they how deep and lasting, how holy, was the work she did for those around her. How often I have pictured to myself the scene as I think it must have been when she awoke in spirit life, and those to whom she had ministered here, and those whose lives were strengthened and sweetened by the touch of her life, and who had preceded her there, crowded around to give her welcome and to tell her of it all with glad thanks and praise. How her beautiful blue eyes must have opened in sweet surprise! How sacred and yet how timid must have been her joy! It would be so hard for her to believe it all. One of the world's nameless saints was she—yet knew it not.

LOVE THE GREAT FACTOR.

But I am wandering far from that beautiful morning and the thing I would tell you. It was when I was "Glad souls without reproach or blot, Who do God's will and know it not," and was wondering in my innocent heart how I would know when I had really crossed that mystical line and was a girl no longer. We were down

in the kitchen—Sister Alice and I—busy with some little task while the two faithful black women were doing the weekly washing near by. All unmindful of them, we were talking, as girls will ever talk, of life and love and all that the future might bring us, telling of our dreams, our hopes, and our ambitions. What brought it out I do not remember, but in response to something she said, I remarked very sincerely, as I then thought, with a girl's lack of wisdom and a girl's decision, "Well, I am never going to be married. I am going to stay always at home with father and mother." Hearing a low laugh from one of the women and realizing that she had heard what I said, I turned to her with "Don't you think so, Zilla? Don't you think I had better stay always with my father and mother?" And then it was that she said the words that have stayed always in my memory: "Yeasam, Miss Flora, I reckon you had, but if bime and by de right one comes erlong and you gets to lubbin him, and he gits to lubbin you, you better go." Did she know the wisdom of her words? Did she think how she had touched upon the very springs of life and love and happy marriage? Had she, like Mary of old, pondered these things in her heart and so come to know what it all meant, or was in only one more instance of those words of wisdom that flash as if by inspiration, from the life of the unthinking and simple? Who can tell? She was an ex-slave with the dark days of bondage but a few short years behind her, so few that she had scarcely yet realized what freedom meant, and yet, who could have answered me more wisely than she had done?

The right one! the heaven appointed mate whose coming was even then so near! He whose love-call was to lead me out of girlhood and set the seal of blessed womanhood upon my brow! Ah, yes! I would "go" with him, and surely, as Zilla said, it was "better so, though the old home and its inmates were never more dear and sacred to me than when I went from it with brave, but tearful "good byes" and low murmured words of blessing.

It is this waiting or not waiting for "de right one" that makes or mars a life time. In all the years since that summer morning, years in which my home has changed from Virginia back to New York, and from there to the beautiful, sun-kissed prairies of Kansas; years in which I question deep of life and love; years in which the twin angels, Pain and Patience, have had their way with me, and have taught me many things; in all these years I have never seen a mistreated, unhappy husband and wife that I have not recalled Zilla's words and have felt that they did not wait "till de right one come erlong."

MARRIAGE IS NOT A LOTTERY.

It is often said "marriage is a lottery" and this seems to be the thought of many an honest man and woman; but I deny it. I know if it seems so, it is because men and women have made it so; because they have not been determined enough to have it otherwise; have not been honest and "square" one with the other; and have rushed into what should be considered the "holly of holies" without due thought and preparation; without trying truly to know each other and to learn if they are suited to live together in love and joy, each being the other's good angel that shall help to strengthen all that is good and to uproot or overcome all that is not good in the other.

Marriage is so sacred, so holy, its responsibilities are so great and important, its privileges so beautiful and satisfying, how shall any one dare enter upon it without most earnest thought and conversation? The wedding day may be full of sunshine, but that is but the beginning. Though the sunshine of love should never be dimmed, the after life, that of which the wedding day is but the portal, must be serious and earnest, full of "ups and owns," of trials and vicissitudes, as well as of joy and pleasures, and husband and wife must needs be suited to each other in every way to keep glad step together down the long path of life.

Nothing is more beautiful than this union of two hearts and lives in one; this consecration of the two to the upbuilding of a home, the welcoming there of the little children in holy love and gladness, living before them strong

ROYAL BAKING POWDER,

Imparts that peculiar lightness, sweetness and flavor noticed in the finest cake, biscuit, rolls, crusts, etc., which expert pastry cooks declare is unobtainable by the use of any other leavening agent.

Made from Pure, Grape Cream of Tartar.

ROYAL BAKING POWDER CO., NEW YORK.

and true day by day, choosing always the better part, the growing acquaintance and knowledge each of the other that brings but deeper love and truer charity. Who shall dare call this a "lottery" or seek to cheapen and degrade its holy offices?

BLENDING OF TWO LIVES.

To the wife who cares for her husband and her home as she should, there is no work to be compared in beauty and sacredness to that which awaits her here. The husband must go out to heavier conflicts. He must meet and wrestle with the forces of evil everywhere; must face envy, greed, and malice, and win his way through valiant effort and persistency. He lays the foundations and builds up the walls of the home, but it is the wife who makes it good and beautiful, a fair haven to which he turns for rest and cheer, where his hands are strengthened for farther work and his heart made strong for the combat. What is so like to Heaven as a true home? It is Heaven—a fore gleam of that place "not built with hands," affording a glimpse of the rest and joy that remains after "life's fitful dream is over and time is merged in eternity."

The blending day by day, month by month, and year by year of man's strength and woman's tenderness, of man's reason and woman's intuition, of man's justice and woman's love, the deepening of the passionate love of youth into the calm, sweet love of later life, the ever-growing confidence and trust, the holding of one's life in abeyance to another in "honor preferring another," the giving of all that is best and sweetest; all that is deepest and holiest each in each to the home life, the blending of all that is best in the two lives in the lives of the children, the outward blossoming of love's holiness—what is so good—what so beautiful as this? All this because one has waited until "de right one came," until heart called unto heart, soul answered unto soul in joy and gladness, and thenceforward the two life-streams flowed on in one strong, ever-deepening current, on and on, ever on to meet the mighty ocean and become a part of its crystal tides.

TRUE MARRIAGE OROAINEO OF GOD.

It is only carelessness and unthinking, only the trying to appear what one is not, that makes of marriage a lottery and a disappointment, a house built upon the sands that must fall when the storms come and the winds of adversity beat upon it. But those who are true in thought and deed, those who would be known as they really are, who fear to dissemble and scorn to act a lie, those who stand in the clear sunlight without fear because in their hearts there is no guile, no deceit, where truth meets truth and respect, where love is wise as it is true, neither disowning nor concealing the faults we each must have so long as we are human beings, but strong to acknowledge and wise to help in overcoming them, those whose love is such as this, who can bear and forbear, are those whose "house is built upon a rock," and who do not fear, however the winds may rave or the storms may beat upon it. Such as these know marriage is something too deep to be expressed in words, a something ordained of God—eternal and true as He

The American Boy

MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World

**"GOOD ALL THE WAY THROUGH"**

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all many sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year)..... 1.00
Kansas Farmer, 1 year..... 1.00

Total \$2.00
Both 1 year for..... \$1.50
Address,

KANSAS FARMER CO.,
Topeka, Kansas.**The Kansas State**

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANSAS

Combination Thief - Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

AGENTS WANTED Sell \$1 bottle Sarsaparilla for 35¢, best seller; 200 percent profit. Write today for terms. F. B. Greene, 115 Lake St., Chicago

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
415 Kansas Avenue. - Topeka, Kansas.

is so. They help to keep our faith in human nature unshaken and strong. Their homes are as oases in the desert where rest and refreshment are given to whosoever comes to them. They show us what is possible, and are object lessons that help us to solve the problems of social and domestic life. The homes of the people are the foundation of our National life, and only as they are strong and pure can the Nation be so. If there can be one true marriage, there can be many. If one true home can be built, more can be also. But we must learn to take deep thought of these things, and to teach our sons and daughters that they will not dare nor desire to do else than to wait till "the right one comes and he gets to lubbin you and you gets to lubbin him," before they go from the old homes to the new ones. Marriage must be regarded as a sacrament and the building of a home as the most earnest and beautiful work of life, rather than, as it now seems in so many cases, a little try at living together which, if it isn't all the heated fancy has painted, can be easily ended in the divorce courts. Oh, the wickedness, the pity of this thought! Is it not one great factor in thoughtless marriage? Is it not because of the quick and easy methods of getting a divorce that our people are so careless and unthinking? So it seems to me and I hail every agitation of this question with joy, believing that some day a Moses will be given us who is wise and strong enough to lead us out of this wilderness of wrong into the clear light of truth. May God speed his coming!

COMPATABILITY IN MARRIED LIFE.

I have spoken of love as a great factor in happy marriage, and so it is—not only great but indispensable, and yet, there must be something else also.

The mother may love a wayward child whose character she can not respect, because she is a mother and can never forget the babe she once held in her arms. She can never believe but that the time will come when her boy or her girl will turn from the evil doing and become again worthy of her love and trust; so she holds to him or her "through good and evil report" and will not let go. Under God, there is nothing that will help more in his redemption, than this clinging, trusting mother-love. He can not get away from it any more than he can get away from the love of God, or his childhood memories. It may be all that keeps alive his faith in the one bright star in his midnight sky. It draws and draws him with resistless force that is at once a pledge and a promise of final victory.

But the wife's love is different, though, as the years pass, it takes on more and more of the elements of this brooding mother-love and the old wife loves and forgives much as the mother does, but not the young wife. In the beginning, there must be respect on both sides and a perfect trust one in the other, a trust that knows no wavering or shadow of change; and each must have the qualities upon which this respect and trust may rest and feed, else is the happiness very short-lived and the two either live miserable, contentious lives in the home, or separating, furnish business for the divorce courts, all of which might be avoided had they but waited to really know each other and their needs and abilities.

Young people often mistake a passing fancy or passion for love and, not waiting to know, not taking thought of their own or the other's characteristics, not seeking to discover if the foundations be real, or if they have each that which will command a lasting love and respect, thinking more of the pleasant excitement of the wedding day, the pretty dresses, the presents, and all the ado made over a bride, than of the quiet days to come after all this is over. They rush into wedlock and often almost before the time allotted for the "honeymoon," they have found out their mistake and are sighing for freedom. Oh, the pity that this should be! Better a thousand times a lonely, single life than such an experience as this. Hail to the one who has the courage to walk alone and find her happiness, her work outside of marriage, rather than to satisfy herself with anything less than the best here. Hail and welcome to the "bachelor girl" and the bachelor boy or man, who keep themselves bright and sunny and are a joy and a blessing in many a home where the cares of life press heavily, and who are willing to wait for their soul's mate even until the "mortal has put on immortality" rather than take any other here! For them and for us all life will yet lift "its inner veil of glory" and we shall know that, whether married or single, we each have our part to do in making the whole grand and beautiful.

The Young Folks

The Two Graces.

BY JOHN C. BAIRD.

Two lovely maidens I chance to know,
Their names pray do not ask;
To con their many graces is
My pencil's only task.

A darkening midnight's stormy sky
One maleden's eyes reveal;
The other's rival with their hue,
The bluebells of the field.

Blonde tresses are the beauty's crown,
One wears them on her brow;
The other's wealth of raven locks
Are truest, critics vow.

O! prate not of the sculptor's art,
Fair forms to marble give.
Canst never rival those two maids,
Who breathe, and think, and live.

The music of celestial harps,
Their voices call to mind;
Once heard, their tones within your
Heart forever are enshrined.

To Youth and Age alike they give
Kind words without alloy,
A cup of water, free and pure,
A chalice brimmed with joy.

As on a lonely isle, they stand,
With leaping waves close by,
A sea of wrongs around them surge;
O'erhead, a leaden sky.

To call his own, let none aspire
Amongst this twain to choose;
The needy world would thus, alas,
A priceless jewel lose.

A dainty form, a gladsome heart;
Rich gifts of mind and soul,
The flowery paths of life they tread,
With Heaven for the goal.

An Intelligent Dog.

This dog, about which I am going to tell you, lives in Topeka at the National Hotel. He is a little over a year old and was bought from a little ragged boy who came into the office of the hotel for the purpose of selling him. He is a mixture of collie and spitz and is as beautiful as he is intelligent. He is of medium size and is covered with fine, white, fluffy hair and his fine, brown eyes bespeak his intelligence.

He is not what you would call a trained dog, but seems to observe and



This is Gaston.

(Courtesy of Daily Capital.)

takes up things of his own accord. He enjoys riding on the elevator and calls it by going to the shaft and giving a few short barks. He often calls it for his master and mistress. When riding on the elevator, he always stands erect on his hind feet. He is a great favorite in the hotel, but he knows his place and no matter how hungry he is, he knows dogs are not allowed in the dining-room. He is especially fond of the head waiter to whom he looks for his food when his master is not there, and when it is time for his meal, he stands just outside the dining-room door and gives his two or three little barks, as he does when he calls the elevator. He often gets his master's clothes and carries them to his bedside before he rises. He paid his own taxes the other day. He was taken to the office of the city clerk. The money was put into an envelope and given him, with directions to carry it to the man at the desk. He took the envelope in



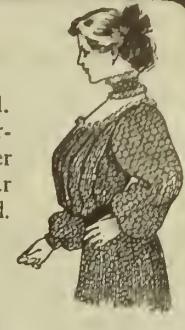
PRINTS

Simpson - Eddystone Silver Greys

Beautiful. Cheerful. Dignified.
They make dresses whose appearance far surpasses the looks of other materials equal in cost. They wear better, and are good all the year round.

Ask your dealer for
Simpson-Eddystone Silver Greys.Three generations of Simpons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for
LOWELL INGRAINS. Look for the hollow stick
and run no risk. Don't accept any other.

Manufactured by BIGELOW CARPET CO.,

New York

LOW
ONE-WAY RATES
VIA

UNION PACIFIC

FROM

TOPEKA
EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whately, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT

To the Stockholders of the Farmers' Co-operative Shipping Association...

NOTICE

The Annual Meeting of the stockholders of The Farmers Cooperative Shipping Association will be held in Topeka, Kans., at the National Hotel, on Wednesday, April fourth, at 4:00 o'clock p. m. for the election of a Board of Directors and the transaction of such other business as may legally come before the stockholders' meeting. F. ENOELHARD, President. H. R. SIGNOR, Secretary.

More Money Made as Local Agent

FOR FARMERS FIVE
YEAR ACCOUNT BOOKS

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N.Y.

leisure time he sits perched on his master's shoulder or hat, and offers friendly little suggestions to the man as he pegs away.

At other times Willie makes little exploring trips about the shop, and with the gravity and deliberation characteristic of his kind, inquires into things about which he does not understand.

"Here, come out and stop your growling," said McCrum to the bird the other day, on the occasion of the visit of a reporter to the place. Instantly the ruffled feathers smoothed themselves, and with as near a smile as a parrot can make Willie clambered off his perch and hopped to his master's knee.

"Ain't you ashamed to be so durn grouch'y to a stranger?" asked the man.

"Cold day, cold day," said Willie, with a little shake of his handsome feathers, and, as if anxious to change the subject, "Cold day; ha, ha! ten cents, please."

"What are you talkin' about, anyhow?" asked the man. "I b'lieve you're crazy. Now, take that old shoe and pull all those nails out, and hurry up with the work."

Without any further ceremony William took the shoe, and with many a grumble and unintelligible utterance proceeded to pull every nail out with his sharp bill.

"There now; that's something like," said the cobbler, "now you can go and get yourself a peanut or two," and without the slightest hesitation and a little screech of delight, the bird made for a box in the corner and fished out two peanuts, which he consumed with much gravity and apparent satisfaction.

"No," said the owner of the bird, "I am not rich, but there isn't money enough in Omaha to buy that bird. He is the only friend I've got—ain't you, Bill?"

"Ha, ha—pretty cold—ten cents, please," observed William.—Omaha News.

Be Manly.

Not long ago Mrs. Noble Prentis, who is so well known in the State of Kansas that one does not need to explain who she is, was talking to a company of boys. Those boys were lucky to be able to listen to a talk from such a woman and I wish the boys all over Kansas might know her and listen to her words, but as they can not, I am going to tell you some of the things she said, which is as good for one boy as another. She said:

"I always assume that every boy I talk to is a little gentleman. Always be polite and alive. When you walk lift your feet and hold up your chin. When you can do that you can do anything. No boy who slouches along and drags his feet can ever do anything manly."

"I don't believe there is a boy living who likes a sneak. I want to tell you about a boy I used to know out in Boulder, Colorado. You know I have been interested in boys for a good while. We had a boys' club out there and I became greatly interested in an Irish boy who was about the dirtiest, raggedest boy we had. But I liked him. He was a handsome boy and smart. We had little drills and marches and I one time caught Elgin stepping on the heels of the smaller boy ahead of him to make him jump and cry out.

"I thought some time what would be the best way to keep Elgin from imposing on the smaller boys. You see he wanted to pick a fight every chance he could get. I don't know what it is that makes some boys want to fight, but they do. Finally I went to Elgin and I said; 'I'm going to make you captain of this company. I want you to act like a captain and I want you to see that the bigger boys don't impose on the smaller ones. Will you do that? You should have seen Elgin straighten up. 'You bet I will,' he said and after that Elgin no longer slouched or dragged his feet and became clean and carefully dressed. You see I had appealed to his pride."

"We all do better if people believe in us. If somebody kept telling me I couldn't do a certain thing I'm afraid that after while I wouldn't try."

"Now there is another thing I want to talk to you about and that is cheerfulness. Be cheerful and you'll find you make yourself friends. Try getting up in the morning cheerful. Remember this, nobody ever made friends by being out of humor. And by being cheerful you not only keep yourself happy, but help others to be happy, too."

if we had lost our chief good, other people's good would yet remain, and that is worth trying for.—George Eliot.

THE KANSAS FARMER

**Food to work on is food to live on.
A man works to live. He must live
to work.**

He does both better on

Uneeda Biscuit

**the soda cracker that contains in the
most properly balanced proportions a
greater amount of nutriment than any
food made from flour.**

Uneeda Biscuit

NATIONAL BISCUIT COMPANY

5¢

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip on the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.

P. O.

Paint Without Oil

Remarkable Discovery that Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package and a Big Book Telling All About Paints and Paint-Making are Mailed Free to Everybody Who Writes.

A. L. Rice, a prominent manufacturer of Adams N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powdrpaint. It comes to you a dry powder and all that is required is cold water to make a paint weatherproof, fireproof and as durable as oil paint. It adheres to any surface, wood, stone or brick, it spreads and looks like oil paint and yet only costs one-fourth as much. For many purposes it is much better than oil paint and is indispensable to every property owner.

Write to Mr. A. L. Rice, 392 North St., Adams, N. Y., and he will send you a free trial of his new discovery, together with color cards and his valuable book on Painting, all free. This book lets you into all the secrets of paint-making, exposes fake paints, tells you what kind of paint to use for different purposes and shows you how you can save and make a good many dollars. Write today and the book and free trial of Paint will be sent you by return mail.

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor,

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)
East Walpole, Mass. Chicago, Ill.

When writing advertisers, please mention this paper.

The Little Ones

Mud Pies.

The Grown Ups are the queerest folks; they never seem to know that mud pies always have to be made just exactly so. You have to have a nice back yard, a sunny, pleasant day; And then you ask some boys and girls to come around and play.

You mix some mud up in a pail, and stir it with a stick; It mustn't be a bit too thin—and not a bit too thick. And then you make it into pies, and pat 'em with your hand, And bake 'em on a nice flat board, and my! but they are grand!

—Carolyn Wells, in St. Nicholas.

A "Truly" Story.

MRS. A. D. GRAY.

"It's been forever and forever muver, since you told me a truly story." My small son drew his chair so close up to mine that I could not move my arm, folded his hands in his lap, and waited.

He felt sure that this hint would be enough. "I wish your mother had two pennies for every 'truly' story she has told the small people in this family," I said.

"But I havn't been here but free years, and the rest have had a heap more time than me. Seems as if you owe me a lot of stories, muver," said Malcolm in an abused voice.

A bright fire blazed on the hearth, and the room was in soft shadow, but for the fire-light. "Firelight stories are the best kind," said Malcolm as he nestled close to my side, "Gwon!"

"Once upon a time a little girl lived on a big, big farm." "All by herself?" asked Malcolm, sitting up very straight.

"No, indeed. She had her sister, just a little older than herself, two jolly boy cousins about her own age, a grandfather, grandmother, and a mother—the finest one I ever knew—and cousins and aunts and uncles who came often to visit."

"Must have got pretty tired wif such lots of folks 'round tellin' her how to mind," said Malcolm with a shrug. "Gwon!"

"Well, at that place there was a fine Shepherd dog and the story is about him mostly. His name was Sam."

"At night when it was time to milk the cows, grandfather would say, 'Here. Same, come on. It's time to go for the cows.'

"Sam would stand right in front of him and not stir, only wag his tail very fast."

"'Go, get them!' grandfather would say."

"The dog always waited for this command, and then off he would dart, all by himself."

"The pasture was a long way from the house, but Sam never failed to bring home the cows. We children used to watch for him to come in sight. There were five or six in the herd, and

I once knew another very bright dog too. I loved him better than either of the others. Sometime perhaps I'll tell you about him, and about that big farm and those four truly children. Now it's my boy's bedtime."

"Seems like bedtimes and getting-up times bofe get here when you don't want them the worst," said Malcolm with a sigh.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, 1906, by Davis W. Clark.)

Second Quarter, Lesson 1.

Matthew 7:15-29. April 1, 1906.

The Two Foundations.

The conclusion to the Sermon on the Mount is easily recognized as in all respects worthy of the most important composition in human language. It is a solemn, earnest, significant and convincing close. It gathers up, in practical form, the fundamental principles and their consequences, previously enunciated. . . . Creed expresses itself in conduct, faith in works. You can not get Escop grapes from acacia thistles. If conduct be right, creed must be right, and works justify the faith. . . . Knowing the will of God theoretically, and even teaching it to others is not sufficient. In the day of the test it will be all in vain for such persons to affirm that they have prophecied and cast out devils. The substance of religion does not consist in these things. Persons who have only such to their credit must certainly hear that fateful word, "Depart." It will not be the angry expression of personal enmity, but the enunciation of an irreversible decree, a penalty which inflicts itself. . . . The essential in

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor,

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)
East Walpole, Mass. Chicago, Ill.

When writing advertisers, please mention this paper.

religion is doing the will of God. Nowhere is the antithesis of profession and life better expressed, "In vain ye call me Master if ye do not the things which I say." Doing Jesus' sayings is not the technical performance of specific acts. It is the being of a certain temper of mind and heart which will on occasion express itself in certain ways and deeds. Do, because one is. . . . It is by this means that the conditions of permanence are met. There is nothing fortuitous about it. No element of chance is here. Obedience to law is obedience to God, for law is the expression of the divine will. Whoever is thus allied to God has His omnipotence pledged for his success. . . . A sincere and persistent purpose in life finds the bed-rock of the divine will, and is not content with anything short of it. It accepts no substitute. Finding the bed-rock, it builds on it. . . . Strength, security, permanence are thus assured.

. . . In contrast to this is the careless, haphazard way of building the life structure, the supreme folly of which is apparent. Such act as if they could claim exemption from the operations of universal law. . . . How soon the primitive Christian life was put to the severest possible test. Not in some far-off, mythical judgment day, but in their own time came the testing. The Roman persecution beat and blew upon the church as an organization, and upon believers as individuals. The church stood because rock-founded. So did the individuals, who were similarly grounded.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Globe and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marion County (1902).
Women's Country Club, Anthony, Harper County.
Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

Mother's Day.

I. The mother's responsibility.
II. The moral instruction of children.
III. Children's rights.
IV. The punishment of children.
I. Every true mother feels instinctively her responsibility to her children. She realizes that it is more than to see that they are comfortably housed, sufficiently fed, and properly clothed. She knows that her responsibility began even before they were born; and her interest never flags while life lasts. Most mothers realize, when it is too late, that their responsibility began when they were forming their own characters and later when they choose the fathers of their children.

II. Too much can not be said as to the moral training of children. Little faults left unnoticed grow into habits; and habits make the character. How soon a child, who has been laughed at for an exaggeration, learns to tell a falsehood! Carelessness of parents, in regard to honesty, often leads a child to become a thief. If a child is allowed to pick up things indiscriminately that do not belong to him, and appropriate them to his own self, it will not be long until he will learn to steal. It requires vigilance continually on the part of the mother if she would have her children from upright characters.

III. This subject of the rights of children is an important one. I have known

mothers to act as if they considered their children their property. They did not consult them in regard to their wishes, and they were not permitted to exercise their own judgment or show their preferences in regard to their belongings. I have known them to give away the children's own things—such as books that had been presented to them—without even consulting the children. Is that just and right? There are many phases of this subject that may be discussed in this paper.

IV. The best way of correcting a child should be discussed in this paper. A wise mother punishes her child not to gratify her anger, but to make him a better child; to teach him that the wrong he has committed must not be repeated; therefore, she will ponder and pray before she acts. The question of corporal punishment may be treated under this subject.

The West Side Study Club.

[I am glad to have the report of the West Side Study club and know of its work. It is not a new club but has not been on the club roll. It is most welcome.]

"The West Side Study Club," four miles west of Delphos, is in its fourth year. The officers for 1906 are: Mrs. Eames, president; Mrs. Emma Clark, vice-president; Mrs. Goodwin, secretary. Mrs. Baldwin, assistant secretary; Mrs. Truix, treasurer. We have a membership of ten, with an average attendance of seven and eight.

Our club motto is, "Whatever you do, do it well."

We meet every third Thursday of each month at 2:30 p. m. Our lessons are taken from the KANSAS FARMER, most always from the miscellaneous programs. Our last lesson was "Present-day Literature." Our next lesson will be "Mission Work in the World." We all like the programs as outlined in the KANSAS FARMER. The topics are assigned to different ones and then we have general discussions.

Last Thursday we met with our vice-president, who has just finished building a beautiful new house. Our husbands went with us, each member taking some part of the dinner. A very enjoyable day was spent.

MRS. GOODWIN.

Mothers and Children.

Mothers wear themselves out and do an injury to their children in not teaching them to help themselves and to be helpful to others. The amount of care that a child requires is very different from that which it may from indulgence demand. If the child were better for it, one would not grudge the time and weariness that the mother or nurse spends, but the child is defrauded in the exercise of those powers which can only develop by being put into use.

It is better for a child to go to sleep by itself than when it is rocked and sung to sleep; but as a general thing mothers prefer the bondage of the process of woolly sleep for their children, and so tie themselves up, and add to their burdens without in the least increasing the comfort of the child.

Mothers would spare themselves greatly if they would only learn that the training of the child begins with the earliest weeks, and that they can make the child understand many things that they would not believe possible.

When the mother is remonstrated with for spoiling the child by overindulgence, she will say, "My child is different from others; she is more nervous. If I do not take her up she will cry and make herself sick."

The child in the beginning, finding that the mother ran to it the minute that it began to cry, of course soon learned this method of summoning her. It also perceived that the louder the cry the greater the indulgence, consequently it develops speedily into a despot, beneath whose tyranny the mother grows wan and pale.

When it is said of her, "She is a perfect slave to her children," she looks satisfied and pleased, as if she had won a martyr's crown, instead of which she has uselessly squandered her strength, and prevented the child from learning proper habits which are as necessary to his growth and development as it is that he should learn to walk instead of creeping the rest of his life, because he may fall and hurt himself, and cry now and then.—Dr. Grace Peckham Murray, in Harper's Bazar.

Here is a dictum right after the heart of the Audubon Society. A scientist says that if the earth were birdless, man could not inhabit it for longer than nine years. All the sprays and poisons in the world would not keep down the insects, which would eat up everything. This fable teaches much regarding men's hats.

TALK ABOUT YOUR HAM

You never tasted meat so sweet and well kept as ham smoked in the new way with Wright's Condensed Smoke. If you have ham, bacon or any kind of meat to cure

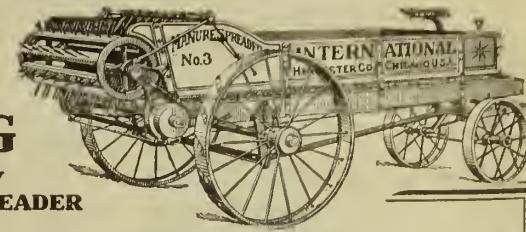
WRIGHT'S CONDENSED SMOKE

will cure it perfectly without loss of time or meat. Easy, certain, safe, healthful. Bottle smokes 280 lbs. At druggists 75 cents. Fully guaranteed. Write for "The New Way." Tells ALL about it.

The E. H. Wright Co., Ltd., 112 W. 4th St., Kansas City, Missouri

THINGS WORTH KNOWING

If you are going to buy
A MANURE SPREADER



No machine within his reach is capable of doing so much for the farmer as the modern manure spreader.

But then it must be a machine with features—features of economy and efficiency.

The I. H. C. Manure Spreader has such features.

Any man of experience knows that a spreader only works perfectly when the load is level.

The I. H. C. Spreader is the only spreader with a vibrating rake in front of the beater or cylinder which levels every load and any load of manure.

Any man knows that the apron operates better when power is applied at both sides.

The I. H. C. spreader apron is driven at both sides from both hind wheels.

This saves all torsion, binding, friction and undue strain, and consequently saves breakages and results in lighter draft.

One lever is better than many levers in operating any machine.

The I. H. C. spreader is the only spreader which is controlled and operated entirely with one lever.

It has ten different feeds—can be adjusted

instantly while in motion to spread three to thirty loads per acre.

Large, solid, steel axles front and rear—front wheels cut under—turns very short.

Steel wheels—no rotting or drying out. Broad faced tires with turned in flange to keep out dirt, mud, etc. Lightest and strongest.

Provided with traction lugs on rear wheels—will work perfectly on hard, frozen or wet ground.

Made in various sizes to suit all requirements.

The I. H. C. spreader will distribute perfectly manure of all kinds—wet, dry, mixed, strawy, full of stalks, frozen, caked, etc.

It may be equipped with special features known as lime and drill attachments for distributing broadcast, or in drills, fine manure, commercial fertilizers, lime, ashes, salt, cotton seed hulls, land plasters, etc.

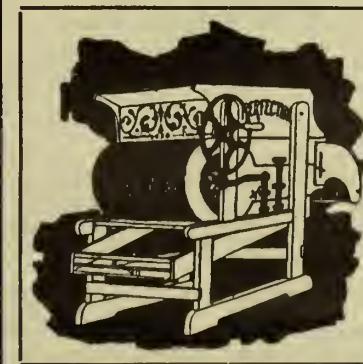
Remember what we have told you—it is the manure spreader with special features which all make for success.

Go to the International Local Agent and look it over, get and read the catalogues or write for further information. It will pay.

International Harvester Company of America,
(Incorporated)
Chicago, Illinois, U. S. A.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: :



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTLE MFG. CO.
305 C KANSAS AVENUE, TOPEKA, KANSAS.

Good Roads

HOW TO GET THEM

SAVE YOUR TIME . SAVE YOUR TEAM . SAVE LABOR . SAVE MONEY

By the use of the Split Log Drag the worst road can be made as good as the best.

A little labor at the right time and in the right place will work wonders.

FREE LECTURES

By D. WARD KING

Olathe	March 26	Coffeyville	April 2
Wellsville	March 27	Independence	April 3
Ottawa	March 28	Chanute	April 4
Iola	March 29	Lawrence	April 5
Girard	March 30	Emporia	April 6
Erie	March 31	Topeka	April 7

At the close of the meeting Mr. King will demonstrate the workings of his inexpensive device on a nearby road.

IT WON'T COST YOU A CENT

Neither Mr. King nor the Santa Fe, which is defraying the cost of this good-roads educational campaign, wants your money.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary
Kansas State Grange, to whom all correspondence
for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master..... N. J. Bachelder, Concord, N. H.
Lecturer..... Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary ... C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... A. P. Reardon, McLouth
Lecturer..... Ole Hibner, Olathe
Stewart..... R. C. Post, Spring Hill

Assistant Stewart..... Frank Wizwell Ochiltree
Chaplain..... Mrs. M. J. Ramage, Arkansas City
Treasurer..... Wm. Henry, Olathe

Secretary..... George Black, Olathe
Gatekeeper..... J. H. Smith, Lone Elm

Ceres..... Mrs. M. L. Allison, Lyndon
Pomona..... Mrs. S. M. Phinney, McLouth

Flora..... Mrs. S. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman..... Topeka, Station A
E. W. Westgate..... Manhattan
George Black, Secretary..... Olathe
Henry Rhoades..... Gardner
J. C. Lovett..... Bucyrus

STATE ORGANIZER.

W. B. Obryhim..... Overbrook

The Grange in Anderson County.

Editor Grange Department:—I am pleased to announce to the Grange Department of the Kansas Farmer that the grange in Anderson County is in a prosperous condition.

On Saturday, March 10, I organized a new grange at Welda, in this county, with a good membership. E. M. Bentley, of Welda, was chosen master and Mrs. J. M. Richardson, of Welda, secretary. This grange is named Welda and has been numbered by the Secretary of the National Grange, 1446. I have reason to think that it will prove a strong factor in our order.

The grange that I belong to, Equity, No. 1411, at Lone Elm, Anderson County, is doing finely this winter. We have a large attendance at our meetings and all seem to be interested and are lending a helping hand to make each meeting interesting and profitable.

At our next meeting we will receive by initiation twenty new members whom we have reason to think are not after loaves and fishes, but for the purpose of making of themselves better men and women and assisting their neighbors in doing the same.

I am informed that Diamond Grange, No. 5, located at Haskell, this county, is building a new grange hall and is increasing in membership. We feel proud of our order in Anderson County. Let us hear from other grange counties in Kansas through the Kansas Farmer.

J. H. SMITH,

Deputy for Anderson County.

Manhattan Grange No. 748.

Editor Grange Department:—I send you another paper for publication read before our grange at a previous meeting, on the subject, "How May We Enhance the Comforts and Attractions of Our Homes and Strengthen Our Attachment to Our Pursuits."

At our last meeting we received nine new members and reinstated two, which makes an addition of eleven to our membership.

At our next meeting we are anticipating a very pleasant and profitable session. Professor TenEyck, of the Agricultural College, is expected to be present and deliver an address. There are others billed for this occasion whose names I am not able to furnish at present.

All our members express themselves as highly pleased to see the grange page in the Kansas Farmer filling up with various items of interest to patrons.

Let us hear from every grange in Kansas.

A. MUNGER.

Spring Hill Grange No. 279.

Spring Hill Grange held its first farmers' institute recently. It was a success and resulted in a permanent organization. Professor Miller, from the Kansas State Agricultural College, delivered an address in the afternoon on "Seed-Corn." At the evening session a literary program was combined with the lectures.

Our grange is in a flourishing condition and the last meeting proved to be very interesting. Several members of Glendale Grange, No. 1433, in Miami County, were received on merit, as this grange had surrendered its charter, many of its members having sold out and moved away.

At this meetings the topics of "Good Roads" and the "Use of Incubators" were thoroughly discussed. Several of our farmers are dragging their roads, and

some are experimenting with natural gas as a heat-producer for their incubators.

Our grange has also organized a fair association. It has leased six acres of land for five years and is arranging to hold a three-days fair each year. This action is the outgrowth of a very successful one-day fair, held in Spring Hill last fall under the auspices of Spring Hill Grange.

"Should the farmers lease their land to gas and oil companies?" will be the topic for discussion by the younger members at the next grange meeting.

STREETER BLAIR.

"How May We Enhance the Comforts and Attractions of Our Homes and Strengthen Our Attachment to Our Pursuits?"

A. MUNGER, BEFORE MANHATTAN GRANGE,
NO. 748.

Comforts and attractions are comparative and largely matters of taste. This is an age of comfort as compared with past times. This is a country of comforts as compared with many other countries of to-day, yet like Oliver Twist, we pass our plates and ask for more. This is the disposition that brings improvement; this has made us what we are. How shall we direct the force that the good work may continue?

First I would say, keep thinking. Try to realize fully what we want or need. Do not act on the first impulse. Study well a plan of life and give it consistent outlines. Have a high ideal and work towards its attainment. Leave out vices great and small, expensive or inexpensive. When we see a chance to mend our methods, stop a waste, or add some needed improvement, be quick to act.

Surround home with what each considers most desirable. What these shall be it is needless to enumerate, for what is indispensable to one may be useless to another.

All can appreciate a house supplied with modern conveniences, with books upon the shelves and pictures on the wall, filled with a family whose principles and morals are worthy of imitation. A farm, neat and well-kept, whether it be an acre or a township; farm buildings orderly and well planned, suited to their intended uses—with this for a foundation, well-directed work will bring the rest.

Here I might stop—but a few details—set out fruit, plant good seed, do good farming or housekeeping, as the case may be. Take good care of stock. These all help to strengthen our attachment. We all like a nice horse better than a poor one—a nice farm better than an ill-kept one.

TAKE PART IN PUBLIC AFFAIRS.

Take a part in matters of public welfare such as good schools, good roads, good public officers and their work. Plant a garden and do not let the weeds take it. The garden is a good place to combine forces and all take part in raising as well as using what will grow there. A few dollars' worth of suitable seed, well planted and tended, will make it the most profitable spot on the farm.

Do not loaf in town or at the neighbors' while your wife slops the hogs or chops the stove wood. Of course you are solicitous for her welfare and know that fresh air and physical culture are just the thing, but do not neglect your own health just to give her a chance.

DON'T USE TOBACCO.

Did any one ever estimate the amount of health, money, and personal cleanliness that is sacrificed by the people of this country that they might use tobacco? If these were all taken into serious consideration by people generally, tobacco factories would have to shut down. What an amount of real, solid comforts might come at less cost than tobacco!

HAVE A HOBBY.

In your business, have a hobby or be a specialist. Do not neglect everything else but let some one thing predominate.

The premium is on the person who can do one thing well. Modern machinery has changed the world's ways. We can not afford to do without machinery, yet it is expensive. Therefore, decide on what you are going to do; get the needed machinery to do it with; then do all you can with that machinery. Do not get a dozen kinds and only use each a little. That is the rock which has cost many a wreck on this beautiful, billowy prairie-land where sailing is so easy and wrecks so disheartening. I have seen more than a car load of half-worn machinery, representing thousands of hard-earned dollars, neglected and



I CURED MY RUPTURE

I Will Show You How To Cure Yours
FREE.

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you. Write to-day. Capt. W. A. Collings, Box 109 Watertown, N. Y.

doing well enough when we might do better." This applies to habits of life as well as to meadow land. Cultivate better the acres we have instead of trying to buy all that joins us. When we can double the crops on what we have is a good time to buy the balance.

HE DIDN'T SELL THE FARM.

A young man once set out an orchard to make the farm sell, as it did not pay and he was going to quit. In a few years and before he found a buyer, the orchard began bearing and made such a nice farm and paying investment, that it was withdrawn from the market and he remained there to old age.

SEE, HEAR AND KNOW.

Do not be too sure we know the best way—that closes the door to improvement. Go from home and go with your eyes open. See how the other people live. There is inspiration in seeing, hearing, and knowing how others do things. Make their best ideas your own and make use of them at home. Eliminate the other sort from your place and yourself.

THE MODERN WAY.

But "how may we strengthen our attachment to our pursuit," is well to ask but who shall answer? Modern machinery with horses, steam and gasoline to furnish motive power, now does most of the work on the farm while we ride along on a spring-seat to see it done; but with this immunity from the most wearing part of farmwork, the old man is going to town and the boys are learning trades or professions until the demand is still for wider implements that fewer hands may sweep over more acres as the procession of humanity moves toward the cities. The census shows that in many places there is an increase of population, but an actual loss of numbers on the farms. It is the old story of the goose that laid the golden egg. When she has brought her owner more than the first early dreams dared picture, her cackle becomes so annoying that her head must come off, and too often like the old woman of the legend, when the goose is killed, enjoyment vanishes.

PITY THE RETIRED FARMER.

The life of a retired farmer on a town lot is not always unalloyed bliss, and the starting of a young man in a city is not without its vicissitudes. Sometimes "tis better to endure the ills we have, than fly to others that we know not of." One way to strengthen then our attachments to our pursuits would be to take a retrospective view and see how our fathers and grandfathers chopped the forests, plowed among stumps, split rails for fence—while we now unroll barbed wire by the mile—cut wheat with a cradle or a sickle, raked and bound it by hand, thrashed it with a flail, and took the crop to mill in a sack before them on a horse. And see how our mothers and grandmothers pulled the flax, spread it out to "rot," broke it, hackled it, spun and wove it, all by hand, and then sewed it into the various articles of household use, also by hand. Compare these methods with those in common use to-day. What a change! But if we try to prove that all this has strengthened attachment to our pursuits, we must confess defeat—the child with a hundred toys wants a thousand more, while he with only one, dares wish for just one more. Children's toys are their tools; grown people's tools are their toys; and the one is about as easily satisfied as the other.

EFFECTS OF AMBITION.

Another influence, difficult to reach, which affects comforts of homes and homes themselves is in our rush and exultation at the thought of what a fine country we live in and how much of the world we can absorb. Are we forgetting that those who toiled a month to accomplish what we want to do in a day, were laying the foundations for this Government? Do we realize that with the same lightning speed with which we want to do everything else, we can run this country to ruin instead of to glory? Do we need the earth? The "Circles in the water" spread until they come to naught."

How many times have the widening circles of empire weakened the strength of the center? And what of those in public office? Is the welfare of the people considered when a man is put in office? Or is it because he is a safe tool to defeat just legislation and make a farce of existing laws?

THE KIND OF LIFE TO LIVE.

Rational, wholesome self-denial, honesty in public and in private life would preserve to posterity some of the comforts we already enjoy. If the machinery of government is clogged with bribes, boddle, and corruption, our descendants will some day experience the hardships of past generations. Unblushing avarice needs to be replaced by right and justice.

High and low, rich and poor alike, need to know that every law of this land applies to them, just as it applies to every other person, and that it will be enforced with equal justice and certainty.

Internal-Trade Movements for February.

Internal-trade movements for February and a two-month period show, in the aggregate marked gains over corresponding activities in either of the two immediately preceding years, according to reports received by the Department of Commerce and Labor, through its Bureau of Statistics.

GRAIN.

Total receipts of grain at 15 interior primary markets during February amounted to 57,659,238 bushels, compared with 45,411,546 for February, 1905, and 56,943,264 for February, 1904. Of the movement for the second month of the current year, 13,956,108 bushels were wheat, 21,826,530 corn, 14,759,192 oats, 6,412,925 barley, and 704,483 rye. During the first two months of 1906 grain receipts at these cities aggregated 129,761,974 bushels, more than 28 million in excess of the corresponding movement of 1905, and over 8 million greater than that of 1904. Of this total 37,138,878 bushels were received at Chicago, 3,944,587 at Cincinnati, 1,918,316 at Cleveland, 2,688,500 at Detroit, 6,029,829 at Duluth, 1,637,375 at Indianapolis, 10,381,500 at Kansas City, 1,188,000 at Little Rock, 3,770,162 at Louisville, 8,434,260 at Milwaukee, 23,540,300 at Minneapolis, 7,915,700 at Omaha, 5,309,300 at Peoria, 13,556,058 at St. Louis, and 2,309,200 at Toledo. Shipments of grain from these 15 markets during the month of February amounted to 40,550,980 bushels in 1906, 26,645,988 in 1905, and 33,565,297 in 1904. Similar shipments for a two-month period were 88,061,080, 63,041,850, and 69,192,509 bushels, respectively. Of the 1906 total, wheat constituted 12,452,748 bushels; corn, 31,503,782; oats, 35,302,226; barley, 7,469,689, and rye, 1,332,535.

LIVE STOCK.

Aggregate receipts of live stock at the markets of Chicago, Kansas City, Omaha, St. Louis, St. Joseph, and St. Paul during February amounted to 3,101,454 head, against 2,832,848 in February, 1905, and 3,215,998 in February, 1904. During the first two months of the current year similar receipts totaled 6,753,708 head, 432,044 more than during the corresponding period in 1905, and 260,640 in excess of the same months in 1904, and consisted of 1,384,692 cattle, 68,837 calves, 3,566,931 hogs, 1,624,118 sheep, and 109,130 horses and mules. Of the total of all classes, 2,956,860 head were received at Chicago, 1,233,409 at Kansas City, 883,465 at Omaha, 768,222 at St. Louis, 615,164 at St. Joseph, and 296,588 at St. Paul. Compared with the corresponding receipts in 1905, gains were made at all of the markets specified with the exception of St. Paul, where a slight loss occurred.

At Chicago the receipts of packing-house products during February amounted to 68,176,684 pounds in 1906, 59,007,372 in 1905, and 46,274,668 in 1904, while shipments for the same months were 212,267,872, 191,122,270, and 214,898,447 pounds, respectively. Receipts during January and February combined were 142,458,663 pounds, compared with 103,958,671 during the corresponding period in 1905, and 98,629,868 in 1904. Shipments which aggregated 463,255,657 pounds during January and February were 86,886,641 pounds in excess of those for the same months of 1905, and 21,660,287 pounds greater than for 1904.

WHEAT.

Receipts of wheat at the spring-wheat markets of Minneapolis, Milwaukee, Duluth, and Chicago from August 1, 1905, to February 28, 1906, amounted

to 127,929,531 bushels, compared with 114,087,406 received during the corresponding months in 1904-5 and 118,250,-850 in 1903-4. Of the present season's movement, 71,801,540 bushels were received at Minneapolis; 5,788,630, at Milwaukee; 32,255,420 at Duluth, and 18,083,941, at Chicago. At the winter-wheat markets of Toledo, St. Louis, Detroit, and Kansas City wheat receipts from July 1, 1905, to February 28, 1906, aggregated 58,041,695 bushels, 8,491,302 greater than the corresponding movement in 1904-5, but 5,961,107 below that for 1903-4. Toledo received 4,410,200 bushels, St. Louis, 18,210,000; Detroit, 1,844,695, and Kansas City, 33,576,800.

The run of petroleum from wells in pipe-line territory during February amounted to 2,761,068.49 barrels and other receipts to 3,088,152.66, while regular deliveries were 3,535,472.77 barrels and other deliveries 2,909,226.56. During February, 1905, similar movements were, runs from wells, 3,280,742.86 barrels; other receipts, 2,698,275.09; regular deliveries, 3,635,613.03, and other deliveries, 2,689,895.46. For the two-month period runs from wells aggregated 5,923,066.90 barrels in 1906, and 7,023,743.99 in 1905; other receipts, 6,957,349.49 in 1906 and 5,764,270.34 in 1905; regular deliveries, 7,387,289.31 in 1906 and 7,663,556.74 in 1905, and other deliveries, 6,388,182.43 in 1906 and 5,670,414.72 in 1905.

The car supply during February was much more satisfactory than for a number of months previous. Very few complaints were received from Middle and Northwestern States, and in these localities the situation was generally indicated as improving rapidly. In the coal regions there was a sharp demand for cars, often in excess of the supply, but in this connection it should be remembered that the recent coal movements have been decidedly abnormal, owing to the threatened labor difficulties. From the South some serious complaints have been received, the scarcity of cars at Charleston, S. C., being reported as worse than ever before, and affecting all classes of freight. Numerous complaints were also received with reference to delays on freight forwarded. At Louisville a pronounced shortage in the supply of cars was reported, affecting all classes of business to a greater or less extent.

The Good Roads Train.

EDITOR KANSAS FARMER:—There is an article in your issue of March 8 upon which I would like to comment. It is

Good Roads

ADD TO YOUR PROPERTY'S VALUE

God roads bring your farm nearer town. Accessibility in all kinds of weather has a financial value. Farmers and merchants are equally interested in improved means of communication.

D. Ward King AND OTHER EXPERT ROAD BUILDERS

WILL BE AT

Olathe	March 26	Coffeyville	April 2
Wellsville	March 27	Independence	April 3
Ottawa	March 28	Chanute	April 4
Iola	March 29	Lawrence	April 5
Girard	March 30	Emporia	April 6
Erie	March 31	Topeka	April 7

and tell about the workings of the Split Log Drag.

Free Lecture and Practical Demonstration

Your presence is wanted—not your money. There's nothing to sell; nor will a contribution be asked. Absolutely free. All expenses paid by the Santa Fe, which is conducting this good-roads campaign.

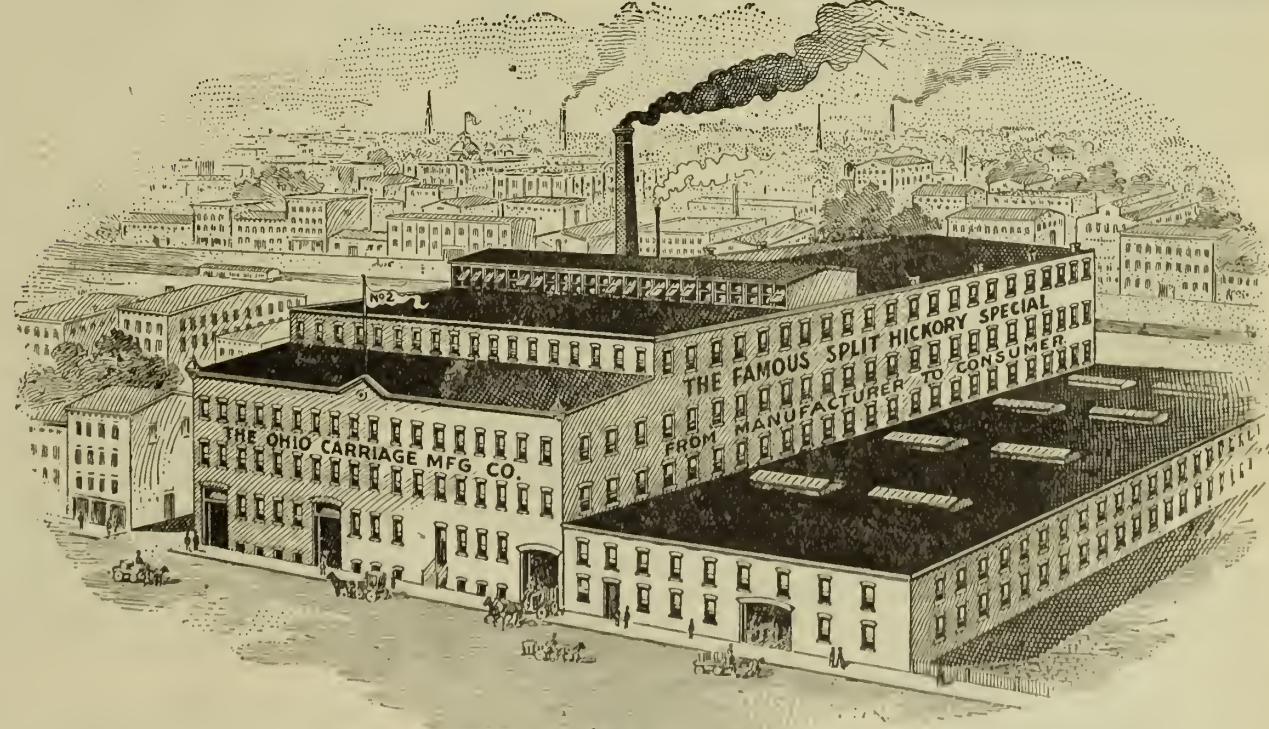
the country for some time, and some of it is very ill advised. J. M. ENGLE.

Dickinson County.

[The principal speaker on the good-roads train will be the inventor of the King road drag, an inexpensive implement by the use of which dirt roads are kept from becoming bad. The Santa Fe is to be commended for bringing before the people of the territory it traverses, practicable methods of maintaining good roads cheaply.—EDITOR.]

It is a good thing for the farmer to always aim to do the best work and to have the best in everything instead of aiming to do the most and have the least and that of poor quality, as is often the case.

The Chinese use envelopes with red lines on them and a heavy red band down the center. A traveler who has been in China investigated the reason for this. It is simple. Chinese mourning being white, it is regarded as an unlucky color for an envelope. Red is a lucky color. Hence the red bars and lines.



A Special Factory for a Special Buggy.

Did you ever see an IDEA grow into an immense FACTORY?

Well, here's a picture of the factory—and the story of how it grew from one man's idea.

This new factory was built and equipped by The Ohio Carriage Mfg. Co., of Cincinnati, and it is devoted exclusively to the manufacture of their famous Split Hickory Special Top Buggy.

It is the only carriage factory in the world making one distinctive and exclusive style of buggy.

Some others claim to be manufacturers by showing pictures of a big factory, but forget to state just where their factory is located principally because it doesn't exist. Our factories are located right here in Cincinnati at 1902 to 2000 Plum St., and 247 to 253 Stark St., and are open to inspection by you or your friends at all times. It's the only one in Cincinnati ad one of only two in the State of Ohio selling their product direct to the consumer.

This is a new plan—this building of one special factory for one special buggy.

The Company started out to make the Split Hickory Special their leader, the best buggy in the world and they have succeeded in placing it far in the lead of all other buggies.

The factory has 75,000 square feet of floor space. Think of it—seventy-five thousand square feet of factory space given over exclusively to the making of one kind of vehicle!

Before this new factory was built, the Company devoted a part of their general factory to the manufacture of the Split Hickory Special, and were able to make a better buggy than any one else at the price.

But now, with an enormous special factory, having acres of floor space, and more skilled carriage builders than ever before, they are bound to surpass their former record.

On the new plan, the Ohio Carriage Mfg. Co. manufacture at a minimum of cost, using the finest grade of material. It is possible to get, and the highest

skilled workmanship. Every man is an expert on making this one special buggy. Every piece of machinery in the factory is made for this particular work. Every piece of material is purchased for this especial make and style of buggy.

With these trained men—with this special material—and with these special facilities, the Ohio Carriage Manufacturing Co., in this Special Split Hickory Buggy at \$50, turn out a vehicle that would cost \$75 anywhere else. They sell the \$50 Split Hickory Special on their 30 Days Free Trial Plan and guarantee every vehicle for two years from the time it leaves the factory.

In spite of the general advance in cost of all raw materials, and the higher prices paid their skilled workmen, they don't charge a cent more for the "Special" this year than they did last.

Our readers can get a copy of the company's handsome 1906 catalogue by sending a postal to H. C. Phelps, president of the Ohio Carriage Mfg. Co. His address is Station 251, Cincinnati, O.

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK TREES best by Test—78 YEARS. We PAY CASH Weekly. WANT MORE SALESMEN. Stark Nursery, Louisiana, Mo.; Huntsville, Ala.

FRUITFUL TREES MILLIONS OF FRUIT AND FOREST TREES. Small Fruits and Evergreens. Russian Mulberry and Black Locust, \$1.00 per 1000. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 609, Beatrice, Neb.

SEEDS That will Grow **PLANTS** None better, even at the high prices. Special bargains: SEEDS, 10 pks. Annual Flowers, 10c; 5 pkts. Vegetables, 10c. PLANTS, 6 Asses., 25c; Geraniums, 25c; 6 Begonias, 25c; 4 Polyanthus, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Pansies free. A. C. Anderson, Columbus, Nebraska.

ROSES & SEEDS FREE • 50¢ WORTH Free rose bush, due bill for 50¢ worth of free seeds, and a free packet of seed will be sent to all sending for our hand-some new catalog. Send 10¢ to postage. A. A. BERRY SEED CO., BOX 37, CLARINDA, IOWA

SEED CORN Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinoia

Iowa Produces the Best
SEED CORN

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 34, Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp-to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo.

Most Extensive Grower of
Grape Vines

In America.
Intro-
ducer
of
GEO. S. JOSSELYN,
FREDONIA, N. Y.

The Worlds Fair Prize Winning Corn
Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tell how to raise Corn every year FREE. John D. Ziller, Haworth, Kansas. HE RAISES CORN.



pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10 cents.

CHARLESTOWN NURSERY, - CHARLESTOWN, MASS.



20 HARDY PLANTS \$5.00

Shrubs and Running Vines

1 Syringa (Lilac)
1 Japan Snowball
1 Double Althea
1 Double-flower Almond
1 Hardy Hydrangea 4 ft.
1 Syringa Mon. Orange
1 Rhue Purple Fringe
1 Forsythia Beautiful
1 Lilac, white and purple
1 Denizia
1 Bridal Veil
1 Rhododendron
1 Azalia Mollie
1 Weigela
1 Rose of Sharon
1 Japan Honeysuckle
1 White Star Clematis
1 Dutchman Pipe
1 Ampelopsis
1 Boston Ivy

20 Hardy Plants from 4 to 5 ft. tall. This entire collection, only \$5.00. Send your order early and we will send this fine collection, worth twenty-five dollars, enough plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.

NATIONAL PLANT CO., Somerville, Mass.

Horticulture

The Home Orchard.

GEORGE WEST MAFFET LAWRENCE, BEFORE THE FARMER'S INSTITUTE, FRIDAY, FEBRUARY, 16.

The fruit-grower makes a severe distinction between planting for commercial purposes and for home use. We must have quantity even at the sacrifice of quality if we become a factor in the market; we must pay strict attention to the ability of the fruit to stand handling, packing, and shipping, and to the holding-up and long-keeping qualities. With home consumption none of these things need be considered, and choice quality and a succession throughout the season are the most important considerations. I shall confine myself to my own experience right here in the suburbs of Lawrence, with a black, waxy soil, with a blue-clay subsoil of a depth varying from 16 to 30 inches; land that should be tile-drained but is not; land where the natural roadside grass is Kentucky blue-grass and where white clover springs spontaneously and is an abomination; a locality where the encroachment of forest-trees is only kept down with the axe and the grubbing hoe; where thousands of elm and maple seedlings root by the roadsides—and all this in Kansas! Let not the Western Kansas farmer whose soil and climate conditions are so vastly different, be deceived by my fruit recommendations as to varieties.

I am talking for the benefit of the farmer who, from the lack of time to care for it, does not plant fruit; who thinks he can buy fruit for his family cheaper than he can raise it, and whose family does without it because the inconvenient dollar is not in reach at the convenient time. I wish to get under the hide of the man who can not afford to indulge his family with fruit, but must face a heavy doctor's bill every year or two because of a not sufficiently varied diet in his family. I desire to reach the ear of the father who knows nothing of the medicinal effect of the various fruits and vegetables. I hope to attract the attention of the parent whose son craves something he knows not what, but has started to tamper with strong drink. I speak for the family of unthrifty children, always unhappy and dissatisfied at home, and longing for a change of scene.

What can add more to the attractiveness of a farm-home than a plentiful and varied fruit supply? What will always bring back to your children pleasurable memories of that home in all their after life? What will better attract boy chums and girl friends and popularize the home more than the charm of gathering direct from the trees, plants, and vines, the luscious, well-ripened fruit, theirs for the asking through an unfailing cordiality?

Can you raise \$50 to spend this spring for choice fruit? If not, can you squeeze \$25? If so, go at once to your home nurserymen and give your order. Explain that you want your order true to name and can not allow substitutions. That which is missing, let your nurserymen order abroad. If you can afford it, let them add varieties, but do not let them strike anything from the following lists. Order two trees of each kind, so if one fails the other will still be left.

ECONOMY IN SPACE.

Where will you find room? The apple-trees must have plenty of room, 30 feet apart. The plums will do best in the dooryard or in the chicken-yard where the earth is tramped. Several peach-trees can be put along the kitchen walk and one or two in the shelter south of protecting buildings—these latter will bear in "peaches-are-killed" years. The cherries can go along the fence-row or beside the front walk or down the driveway. A pear-tree will do well close to and north of the house, other pears will take but little room scattered here and there. The grapes can go upon an arbor over the kitchen walk or be fastened against the sunny side of a building; a few bushes of currants and gooseberries will do well on the north (shady) side of a tight board fence. The strawberries, raspberries, and blackberries should be in the kitchen-garden behind chicken-wire fencing. Kindly remember that a horse will go a mile to bark a peach-tree and he is very fond of plum foliage; a cow can thrash to ribbons a small tree or bush with her horns and a 400-pound hog can bear down and snap off a tree trunk three inches through, or work over and gnaw all the surface.

roots of any large fruit-tree. This has cost me quite a number of dollars to learn.

VARIETIES OF APPLES.

And now for the varieties from actual experience at "Elkhorn Fruiter." Of the apples, the earliest of all for eating and apple-sauce is the Red Astrachan. Next follows the Strawberry-apple, a handsomely striped sheep-nose of choice quality, each perfect specimen a poem in itself, and lasting through a long season because of the habit of the tree to ripen only a few specimens at a time, and further it bears each and every year. Then comes the Maiden's Blush, a flat, yellow apple with red cheek, a superior cooking-apple, but easily blemished with insects; and at the same times comes the little, round Red June. Next in importance is the Pennsylvania Red-streak, a very large apple of highest dessert quality, that ripens a few at a time and keeps well in the cellar until Christmas. It has borne eleven crops in twelve years with us. Where room will allow on a town lot, the two varieties, Strawberry-apple and Pennsylvania Red-streak, will furnish a succession from early to late and they can take the place of shade-trees. Next in the list we place Summer Rambo and if space will permit a very superior white apple is Cooper's Early White. The Dominie is a fine eating- and cooking-apple, but it has the fault of rotting on the tree and shedding too freely. When we come to late fall and winter apples, the Winesap outranks them all for quality; the Genton (Jeniton) keeps longest of them all its crisp sprightliness of flesh, although it runs small because of overbearing and will crack badly if heavy, late rains ensue, and it suffers some from a blistery rot; the Jonathan is a superior dessert apple that brings the highest price—its weak point is that it sheds to the ground prematurely and will have to be picked before the rest; the Missouri Pippin is early to come into bearing, it is small and a long keeper; the Ben Davis outranks the entire lot as a pie apple; it is choice for use in jelly, applesauce and "liquid apple-jelly" (a product halfway between maple-syrup and strained honey). By all means add the Rome Beauty to the list. Two apples not on my list but should be on yours, are the Grimes' Golden and York Imperial. We are all going to plant this year a mammoth apple that is attracting attention—the Wolf River.

HOW TO PICK.

And now that we have the apples, we must have a picking-stick with which to reach to the top of the highest trees and take the perfectly ripened specimens as they mature. Have two poles for handles, one twelve feet and the other sixteen; take an oaken block one inch thick and 3½ square; bore a three-quarter hole in the center to fit the handles; then a series of holes to fit number-nine wire, in as large a circle as the block will allow; take pieces of wire about ten inches long and force each end up through the holes in block and staple to place. When completed the picker should resemble the human hand with all the fingers held touching at points. The wires should be pulled apart or pressed together to suit the size of the fruit it is about to be slipped over.

PEACHES.

Now as to peaches, remember you can not expect over four crops in ten years, but you will get some peaches the second year from planting. My list would be Early Rivers, Early Crawford, Alberta, Stump the World, Crosby, and Crawford Late. Ask the nurseryman to add two or three more in the succession and add a couple of large clingings.

PEARS.

After a desperate and losing fight with pear blight, I have fallen back to the Bartlett, which is the finest of them all in quality, and after being cut to pieces in cutting out the blight will put out again and last a long time before succumbing finally; try also the Duchess and the Keiffer. The Anjou is a very fine pear. Set these in the sod on the lawn and in the best drained place you can find.

So long as we had the Wild Goose and Minor plums on the place we had a yearly supply; try these two and ask the nurseryman to recommend several Japan plums.

CHERRIES—SMALL FRUITS.

On the cherry list are the successful three: Early Richmond, English Morello and Montmorency. The cherry is a short-lived tree and will soon play out if any large limbs are injured or broken. As they give way, be sure to make the loss good by planting others.

Try a chapter of mulberry-trees and

HEALTHY TREES Honest in quality. Grafted Apples 4c; Budded Peaches, 4c; Budded Cherries, 15c each good varieties. Concord Grapes, 6c per 100; Black Locust and Bass Mulberry, \$1 per 1000. We pay freight. Complete catalog free. Gibralith Nurseries, Box 32, Fairbury, Neb.

READER IF YOU HAVE NO BERRY PATCH
O.SAY! and desire one, my 1906 catalogue may tell you how to start it. 50 varieties plants low priced.

B. F. SMITH, Drawer C, Lawrence, Kans.

Trees, Plants & Seeds THAT GROW
Best quality, Good bearers, Low prices. Apple 4c; Plum and Cherry 12c; Peach 4c; all budded; Concord Grapes 2c; Forest Tree Seed. **GERMAN NURSERIES** Carl Sonderagger, Prop. on trees. Catalogue, English or German, free. Write for it today. Address GERMAN NURSERIES, Box 9, Beatrice, Neb.

WRAGG TREES
WE PAY FREIGHT.
SEND for our handsome catalog of Trees, Shrubs, Roses, Evergreens, Etc. We deal Direct. Our prices are lowest. M. J. WRAGG NURSERY COMPANY, 307 Good Block, DES MOINES, IOWA.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

50 BULBS
25 Cents. Will grow in the house or out of doors. Hyacinths, Tulips, Gladiolus, Crocus, Fuchsias, Oxalis, Tuberoses, Begonia, Jonquils, Daffodils, Chinese Lily, Dewey Lily, Gloriosa, Lillies of the Valley—all postpaid, 25c, in stamp. FREE a big collection of flower-seeds—over 200 kinds. HILLSIDE NURSERY, SOMERVILLE, MASS.

OUR CATALOGUE opens with a triumphant arch made up of over 40 varieties of vegetables the world has learned to value, and of which we were the original introducers. It has some both new and good for this season, and a vast variety of standard vegetable and flower-seed, with intelligent instructions for the cultivation of all of them. Catalogue FREE. J. J. H. GREGORY & SON Marblehead, Mass.

GREGORY'S SEED CATALOGUE FOR 1906

High-Grade Flower Seeds.
20 Packages FOR 10c.

KINDS.	KINDS.	KINDS.
Bat, Button, 10 Poppy, 18 Portulaca, 20	Candytuft, 10 Marigold, 18	Calla Lily, 6 Fuchsias, 18
10-Weeks Stock, 6 Aster, 16 Pansy, 10	Sweet Alyssum, 6 Zinnia, 12 Sweet Peas, 10	Calceolaria, 8 Balsam, 12 Petals, 10
Eschscholtzia, 8 Balsam, 12 Petals, 10	Sweet William, 8 Larkspur, 6 Petunia, 10	Nasturtium, 10 Calliopsis, 8
		Sweet Mignonette.

All of the above sent to any address, post-paid, for 10c, silver or six two-cent stamps. As a premium and to introduce our seeds into every household, we will also send a collection of fine beautiful bulbs FREE with Catalogue.

Somerville Nursery, SOMERVILLE, MASS.

SEED CORN

There are many points to be considered in selecting seed corn; some of the most important are outlined in the above cuts; namely, well filled out at butt end with small to medium sized shank; the tip of ear well capped or covered over with full sized grains; the kernels should be wedge shaped from cap to where it rounds off at point or germ end and the rows should be close together but still not so tight as to smother the germ and cause mould. The grain must be dry and set on a small cob which is such texture that it will dry out easily and quickly. These points are all brought to perfection in the new

GOLDEN WEST

It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue, illustrated, describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seed. Mailed free if you mention this paper.

IOWA SEED CO., DES MOINES, IOWA.



Accuracy is not mere chance any more than the high scores of a crack shot.

The accuracy of the Stevens barrel is the result of best material, best workmanship and careful testing at every point.

Our Catalogue of Firearms
will interest you. 140 pages, describing different styles, how to select a rifle, how to care for a rifle, talks on ammunition, and much other valuable information. Send 4 cents in stamps to cover postage, and we will send it free. If your dealer cannot supply you, write to us.

J. Stevens Arms & Tool Co.,
125 High Street,
Chicopee Falls, Mass., U. S. A.



42 Plants \$2.50

10 Currant Bushes 10 Gooseberry Bushes
10 Raspberry Bushes 10 Blackberry Bushes
1 Concord Grape Vine 1 Niagara Grape Vine

Greatest Bargain yet. 42 plants, all grown, ready to bear fruit, for only \$2.50. Every one should have these lovely fruits growing in their garden. Now is your chance. Order early, and be sure of them.

BAY STATE PLANT CO., Boston, Mass.



15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer, that will flower for the next 10 years with plenty of beautiful flowers.

1 Clump Mixed Phlox,	All Colors, 25c
1 Clump Hollyhocks	25c
1 Clump Mixed Sweet Williams	25c
1 Clump Mixed Baby Breath	25c
1 Clump Mixed Ragged Robin	25c
1 Clump Mixed Crysanthemum	25c
1 Clump Mixed Dianthus Pink	25c
1 Clump Mixed Golden Glow	25c
1 Clump Mixed Poppy	25c
1 Clump Mixed Bleeding Heart	25c
1 Clump Mixed Coreopsis Harvest Moon	25c
1 Clump Mixed Dahlias	25c
1 Clump Mixed Hardy Aster	25c
1 Clump Mixed Iris	25c
This entire collection, worth \$5.00, for only	\$2.00

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, MALDEN, MASS.

The Best Fruit Paper

In The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Everyone who has a few fruit trees or a garden, should read



Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

When writing advertisers, please mention this paper.

a row of dwarf Juneberries, the latter a cultivated huckleberry that always gives a reward. They make a fine bush for the chickens to loaf under.

For grapes, the four standbys are Moore's Early, Worden, Concord and the White Niagara.

If the blossoms have not been removed from the strawberry plants you set this spring, you can get some berries this May from them without serious injury to an extra-early set plant. Try four varieties—the Warfield and the Senator Dunlap for main crop; then the Parker Earle which will give you much pleasure because of the great mass of fruit it staggers up under and lifts free from the ground; then the Clyde, which ripens its fruit lying on the ground, for all the world like a nest of bright-red quail's eggs. Then there is the Parson's Beauty that is showing marked superiority in the hands of our local growers.

The Kansas and the Cumberland will give you all the black raspberries you will need; the Cardinal is a purple cap of great vigor; and for red raspberries the Miller and the Loudoun will complete the list. Remember you will have to severely keep the red raspberries confined to a narrow row if you expect much fruit, as they spring up so from the roots to weaken themselves and prevent fruiting.

I have been patiently waiting for years to get a start of blackberries from our mutual friend, D. G. Watt, who is perfecting a variety of marked superiority which has not yet been introduced. The Kenoyer is a new variety of much merit. The Lucretia Dewberry is much larger than most blackberries and is a running vine with a plenty of awful thorns.

FOR ADORNMENT.

Have you a daughter nearing womanhood? By all means send away and get her some of the rose collections that can be had for from ten to twelve cents per plant from the rose specialists. Two or three dollars will make a great showing and she can revel in roses until snow flies and besides she can propagate plants for the whole township. Besides the hardy roses of every color and shade, there are the monthly roses in endless profusion; the climbers and ramblers and the moss roses. They must have the direct sun to succeed.

If you live upon a city lot, there is no reason why you can not raise some fruit—not a family supply, but for the pleasure of it; a few plants of pie-plant, set just anywhere; an asparagus bed three-by-six feet; a strawberry bed set so close as to step on the fruit in gathering. At least have grapes and roses if you have the necessary sunny exposure for them. And put in the shade between two houses a half dozen currant- and gooseberry-bushes. In the recess of the L of the house, if on the north, place a pear; if on the south, a peach. If you can replace a shade-tree with one or two apples as mentioned elsewhere, there will be a chance of gathering the fruit yourself, as only a few ripening at a time is not nearly the temptation as a tree full of bright red fruit. A cherry-tree is much too great a temptation for the small boy. As the red raspberry excels in delicacy of flavor all of the bush fruits, room might be found for a clump or row.

And now if you will persistently replace all trees and plants that fail and care for them until all are in full bearing, you will then find that you have added a cool thousand dollars to the selling price of your property; the word "home" will have a new significance and your family will not only be healthier and happier, but will be all the more industrious, thrifty and energetic.

Shade Trees for the Home.

E. F. STEPHENS, CRETTE, NEBRASKA.

A home whether in the country or town should be surrounded with stately shade-trees. They make a background or frame-work for the place. In a cold climate they are a shelter, while in a hot climate they give necessary shade, cutting off the burning rays of the sun from porch, lawn, or walks. They screen the south and west windows from the hot sunlight and make the home more beautiful, more comfortable, and more valuable. To plant trees is the most economical way of enhancing the value of property. A house may be built in a summer, while a home properly shaded by majestic elms can not be produced in a generation. Public parks not only contribute to beauty, comfort, and health, but enhance the value of property.

SELECTION OF VARIETIES.

Perhaps the elm should take first
(Continued on page 88.)

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, HOXLE, Kans.

ALFALFA SEED

MCBETH & KINNISON

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

ALFALFA SEED

F. D. MORRISON.

Kansas Grown. Non-Irrigated. From grower to consumer. Write for prices.

MEADE, KANSAS

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Chokee, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to

KANSAS SEED HOUSE

Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

RATEKIN'S SEED CORN

"Pride of Nishua" is a golden yellow, 16 to 24 rows; deep grains and small cob; matures in 95 to 100 days; of great vitality and strength to resist drouth and other unfavorable conditions; outyields any other yellow corn in existence, making from 60 to 100 bushels per acre on good land. "Ratekin's Silver Mine," white, has greatest record for large yields of any white corn in the world—averaging 176 bushels per acre in seven states; full counterpart of "Pride of Nishua".

Our Seed all grown from absolutely pure stock, especially for Seed purposes, is carefully selected, sorted, and butt and tip ends taken off, and is all graded to uniform size. Seed corn shelled and graded or in the ear. It is the kind that pays to plant. Change your seed and grow bigger and better crops. Price, \$1.35, shelled, sacked on board cars here. Our big Illustrated Catalog of all Farm and Garden Seeds is FREE if you mention this paper. Write for it today.

Address, RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

HARDY ROSE BUSHES

Live Out Doors, Summer and Winter.

10 ROSE BUSHES \$1.50

- 1 General Jacqueminot (Brilliant Red).
- 1 American Beauty (Red). Beautiful.
- 1 Magna Charta (Pink). Extra.
- 1 Mrs. John Lang (Soft Rose).
- 1 Ulrich Brunner (Cherry Red).
- 1 Pearl des Blanches (White).
- 1 Moss Rose (Beautiful Red).
- 1 Celine Forestier (Yellow). Fine.
- 1 Sweet Briar (Sweet Scented).
- 1 Crimson Rambler (Large, Beautiful, Running Rose).

Ton of the choicest varieties, 3 and 4 years old Rose Bushes, only \$1.50. The regular price for these bushes is seventy-five cents each. This is a great bargain. You will notice that this collection has very chosen, beautiful shades. All green, picked in mosa. True to name. Do not miss this grand offer.

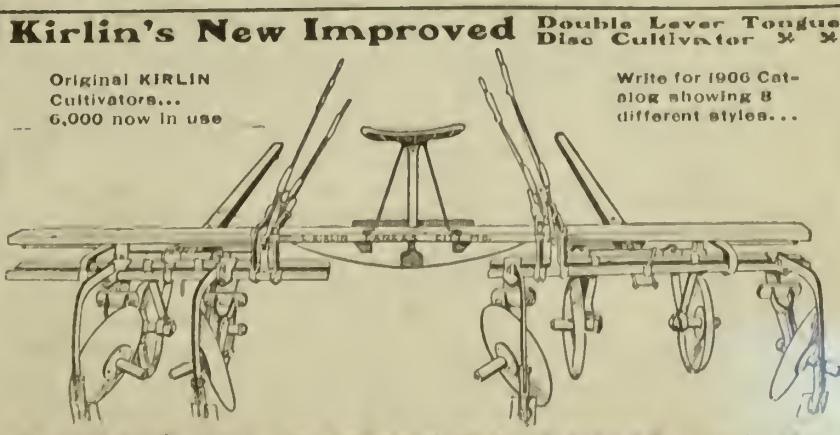
ORDER QUICK, and get this fine Collection imported from Holland. Those bushes are grafted. They will flower this year.

WAYSIDE NURSERY, Somerville, Mass.

Kirlin's New Improved Double Lever Tongue Disc Cultivator

Original KIRLIN Cultivators...
6,000 now in use

Write for 1906 Catalog showing 8 different styles...



L. KIRLIN, 1203 UNION AVENUE, KANSAS CITY, MO.

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Hettich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale; also a few cockerels. Bertha Gresham, Bucklin, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kansas.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 96%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

PARTRIDGE COCHINS—Toulouse Geese, purebred; farm raised. Eggs, \$1 per 13 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Langshan eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Bred by W. F. Cox, Clinton, Kansas. Eggs for sale at \$2 per 15.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

S. C. B. LEGHORNS—Beautiful fowls, fine markings, splendid layers. Eggs, \$1 per sitting; \$5 per hundred. Mrs. D. M. Evans, Edgerton, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller, "Vineyard Farm," Mound City, Kans.

RARRED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

FOR SALE—Light Brahma and White Wyandotte cockerels. I have a few high-scoring ones left, as it is getting late I will now offer them at a bargain, \$2 to \$5, scoring 92 to 94. Satisfaction guaranteed. Eggs, \$1 to \$2 for 15; Buff Cochon Bantam eggs, \$1 to \$2. Mrs. J. R. Kenworthy, Wichita, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Matings pens headed by 91% to 93 point birds; females 91% to 93%. Eggs, \$2 per 15. Utility pen cocks, 91 to 92%; \$1 per 15. \$5 per 100. Silver Penched Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94%; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners; 15 for \$2; from flock, 100 for \$5. W. C. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

CHICK-O for baby chicks; a complete, balanced ration. Ask your dealer or write, D. O. Coe, Topeka.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kans.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 for \$3.50. H. F. Brueggemann, Route 2, Herington, Kans.

PURE BRED White Wyandotte eggs for sale; \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94% points. Write for prices. A. F. Hutley, Maple Hill, Kansas.

FINE BLACK LANGSHANS started from \$3.00 eggs. Fifteen eggs for 50 cents. Minnie D. Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. Kling, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

FOR SALE—Silver Laced Wyandottes, White Plymouth Rocks and Partridge Cochins. Fine stock, each raised on a separate ranch. Eggs, per sitting of 15, \$1. Letters promptly answered. Address W. C. Koenig, Nortonville, Kans., First Nat'l Bank Bldg.

BARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Galbraith, White City, Kansas.

BUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmans, M. B. turkeys, and Toulouse geese. From prize-winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovette, Proprietor, Mullinville, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandalla, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 15 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks. Barred, Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and Brown Leghorns, White, Buff and Silver-Laced Wyandottes. Games, Golden Sea-bright Bantams, Pearl and White guinea fowls, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruner, Platte Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dusky strain. Eggs 5 cents each, \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeders of choicest birds. Eggs \$1.50 per 15. Member American White, P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Kans.

THE KANSAS FARMER

The Poultry Yard

How Shall I Start?

A reader living in eastern Massachusetts asked the New England Farmer's advice as to doing more and better work with poultry on his farm, and says he has become convinced that eggs and poultry for market will pay him a better profit than any other line of farmwork.

This subject came up one day at the dinner table, during the poultry conference at Guelph, Ontario, and the New England Farmer editor asked three or four of the men present how they would answer such a question. One answered: "Get rid of his old, lousy, scrub hens and get good, pure-bred stock." The professor answered, sententiously: "Clean up!" The discussion which the several answers excited gave differing methods of reaching the same result, and the editor pitched upon the two answers given above as going to the root of the whole matter—only that he unites them into one answer.

He says: "That there is urgent need of a thorough cleaning-up of poultry house, or room, or quarters, on every farm where poultry is kept, there is ample evidence, and that such a cleaning-up will give best results, if joined with a getting rid of the old, lousy birds which are seen on most farms, goes without saying. Indeed, the getting rid of the old, common stock is generally the first step to recommend, because no self-respecting man will put the new, better birds into the filthy old house or room. Having decided to have better poultry, he will, from just common decency, put the quarters into decent condition to house them.

"The question is the most interesting at this time because we are at the beginning of a new season, when we are bringing on a new generation of poultry, and the spring is the most favorable time to start. This is supposing we are to start with hatching the new stock from eggs of pure-bred fowls, and that is doubtless the cheapest and easiest way in which to make a wholly new start. Starting in this way, that is, by buying eggs of the chosen variety, we can raise the new stock wholly free of the handicaps of the old by keeping the chickens wholly separate from the old, and then kill off for market every old bird on the place before the youngsters get mature and want the house-room. By having the house (or room) thoroughly cleaned up and whitewashed this summer, and keeping the youngsters wholly separate from the old birds, the youngsters should not get lousy when they come into their quarters in the fall, and they start into their winter's work innocent of that very serious handicap.

"Believing that a good many readers of this page are like minded, we will give a little space in several future numbers to a consideration of this question, namely, How Shall I start?

"Our friend says that he wants to have a hundred well-matured pullets to go into their winter quarters next fall, and asks how many eggs he should plan to incubate to assure that number. That there are many slips between the cup and the lip we all know, and if we were planning for a hundred pullets we would incubate eight hundred eggs, upon the expectation that we would need to incubate four eggs to secure one well-developed chicken, and that half the chickens would be pullets. That this is a conservative estimate many will claim, and there is the experience of Prof. Gowell, of the Maine Experiment station, last year, to back them up; the professor wanted 1,500 pullets and planned to incubate 9,000 eggs, estimating that he could raise a chicken from each three eggs incubated. The eggs hatched better than he expected (they were laid by dry-fed hens), and the chickens, being dry-fed, lived better than he expected, and he found himself in the fall the fortunate possessor of a few over 2,000 fine, "husky" pullets, and actually had to build an additional hundred-feet to his new poultry house to take care of the extra 500 pullets!

"By and large, however, we would think it the part of wisdom to be on the safe side, and would recommend our friend to incubate four eggs for every mature chicken he wants. If he is so fortunate as to have more than he wants, he can readily sell them for a good price—if they are of good stock. That is one of the great advantages of having good, pure-bred stock; you can turn it into cash in a day! Prof. Gowell had that opportunity with his

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHANS—Hens scoring 93 and upwards—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF PLYMOUTH ROCK EGGS for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Wichita, Kansas.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kansas.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

FOR SALE—Young M. B. turkey toms from high-scoring, prize-winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas, \$1 per 15. Virga Hamburgs, Kinsley, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

CHOICE B. P. ROCK cockerels and pullets. Collier pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. Turkeys, \$1.50 per 15. Emden geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Avenue, Topeka, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93% to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

BARRED ROCKS EXCLUSIVELY—Leffel strain. Large, heavy-boned, fine, clear; Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards, John D. Ziller, Hiawatha, Kansas.

WHITE WYANDOTTE COCKERELS (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Meriden, Kansas.

MAMMOTH BRONZE TURKEYS FOR SALE—Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kansas.

LIGHT BRAHMAS More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver, - Blue Mound, Kansas.

Eggs for Hatching

M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

E. J. Evans, Route 4, Fort Scott, Kansas.

Barred Plymouth Rocks

EXCLUSIVELY—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50.

E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READINESS

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 196, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention KANSAS FARMER when writing.

Neosho Poultry Yards

Rose Comb R. I. Reds exclusively. Two first, one second and one third prizes at the Emporia, Dec. 1906, Show. One pen of fine red pullets and hens mated to a red male for producing red pullet eggs from this yard. \$2 per 15, others at \$1.50. J. W. Swartz, Americus, Kansas.

POULTRY BREEDERS' DIRECTORY.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. C. MILLER, Breeder. Stock for sale. Fifteen eggs for \$2. Address 546 Missouri St., LAWRENCE, KANS

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—Fine stock; farm raised. Price, \$1 for 15; special price by the hundred.

BROUZY BREEDERS' DIRECTORY.

What Two Lice Can Do

They can virtually go right down in the poultry keeper's pocket and take the money. If left undisturbed the natural increase is so great that they soon multiply to a swarm that will sap the life of young chicks, breed disease in the pens and ruin profit.

Instant Louse Killer

(Powder or Liquid)

Kills lice on poultry, lice on stock, and ticks on sheep. It is harmless to use, and will effectively destroy cabbage worms, slugs on rose bushes, and bugs on cucumber, squash and melon vines. Instant Louse Killer is the original powder louse killer put up in round cans with perforated top. Look for the word "Instant" on the can —then you won't get an imitation.

1 lb. 25c Except in Canada
3 lbs. 60c West and South

If your dealer cannot supply you we will forward 1 lb. by mail or express, prepaid, for 85c.

Manufactured by

DR. HESS & CLARK,
Ashland, Ohio.**S. L. Wyandottes**

Indian Runner ducks. Our Wyandottes have been line bred for 20 years and never fall in any company. Our yards are headed by Silver Prince, the 1st cock at the Kansas State Show, and three of his cockerels. Stock for sale. Eggs, \$2 per sitting. Incubator eggs, \$5 per hundred. Duck eggs, \$1.50 per sitting.

M. B. CAIDWELL, Broughton, Kansas

GREIDER'S FINE CATALOGUE
of Standard bred poultry for 1906, printed in beautiful colors, contains fine chrome illustrations and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, etc., etc. This book only 10 cents.
B. H. GREIDER, RHEEMS, PA.

STEINMECH'S CHICKENS
Winners at St. Louis and Portland. Farm raised. 15 varieties. Catalog FREE. Contains "Some Good Suggest." Write.
Steinmech & Co., 312 Market St., St. Louis, Mo.

\$12.80 FOR 200 EGG INCUBATOR
Perfect in construction and motion. Hatches every fertile egg. Write for catalog today.
GEO. H. STAHL, Quincy, Ill.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.
Topeka Supply House
7th and Quincy, Topeka, Kansas.

\$7.00
Buys the Best
120-EGG Incubator
freight prepaid, ever made. Double cases all over; best copper tank; hot water; self-regulating. Best 100 chick hot water Brooder \$4.50. Incubator and Brooder ordered together \$11.00. Satisfaction guaranteed. Our book, "Hatching Facts," tells all about them. Mailed free. Write today.
Belle City Incubator Co., Box 18, Racine, Wis.

SCOTCH COLLIES.

SCOTCH COLLIES—Scotch Collie pups from registered stock for sale. Emporia, Kansas, W. H. Richards, V. S., Emporia, Kans.

SCOTCH COLLIE PUPPS for sale, \$4 and \$5 each. Pedigrees furnished. G. B. Gresham, Box 102, Bucklin, Kans.

STOLL'S STAY-THERE EAR MARK.
The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send or sample. T. B. Stoll, Beeville, Tex.

surplus, and a visiting poultryman offered him \$500 for 200 of those good pullets; two dollars and fifty cents apiece! They were not "fancy" Barred Rocks, either, although the offer was from a fancy poultry breeder and judge of pure-bred poultry at many large shows. They were simply good, pure-bred Plymouth Rocks, well-hatched, grown, and fully matured by October—and after the professor had declined his offer the poultry man making it told him they were the best average lot of Barred Rock pullets he had ever seen! Just think of it—and the man that said that has been breeding fine show stock for years and years! Possibly he, too, has yet something to learn about raising good, well-matured pullets."

Thoroughbred Poultry.

There are so many people who say, "a hen is a hen anyway," meaning by that that there is no difference between a thoroughbred hen and a mongrel, that it grieves on the nerves of the thoroughbred poultry breeder. The aim of all true poultry men is "more flesh and more eggs," and by their efforts these have been augmented from year to year. A recent article by T. F. McGrew, of New York, a poultry expert of National reputation, is right to the point. We take pleasure in quoting it. "In grandfather's time if the hens produced twenty-five or thirty eggs during the year, and the greater portion of these in the springtime, it was all that was expected of them. These were known as the dunghill or barnyard fowls. About 1867 the era of progress in poultry industry in this country commenced. The census of 1870 gave an average of about 30 eggs per hen per year from the limited information gathered. Thirty years later the census report credits about 70 eggs per hen as the average product of the United States. All of this increase has come from the one source of better poultry, created under the influence of the fancier, who pays special attention to what should be known as "Standard-Bred Poultry."

In the egg-laying contests conducted under either private, State or National control in this country, Australia or England, there has never been recorded to our certain knowledge an instance where mongrel or cross-bred fowls won the laurels or came anywhere near doing so. The best market poultry, the best turkeys and waterfowls of all kinds are those bred direct from some one of the many standard-bred varieties. If there is anyone who can gainsay these statements and prove us in error, let him do so; but so long as there can be no contradiction to these facts, why should anyone in the wide, wide world continue to harbor cross-bred, mongrel stock in hopes of making a profit therefrom, when the evidences are so overwhelming that only those who keep properly selected stock for the intended purposes, make money from the growing of poultry.

The best egg-producing hens, the best meat-producing hens, the finest market turkeys, ducks, and geese come into our markets only through the existence of standard-bred poultry. We have not in all our experience known of a single instance where "even value received in the keeping of poultry came from the possession of the common barnyard stock," and in every instance of profit and success, the ground work or foundation of the same is from some one or more of the standard-bred varieties. The expense of possessing good stock of this kind is so slight as to prevent no one from having the same. Gradually, from any farm, every single head of the old time, anti-dated, unvaluable stock can be sold, and the money received from same expended for some of the better kinds that anyone can hope to succeed with. These are facts that can not be gainsaid or disputed. Every one familiar with growing of poultry fully realizes this to be the condition. With this overwhelming proof all in one direction, how it can be possible for the agricultural interest of the country to cling to a single, old-fashioned hen in hopes of gaining something from her, is more than any of us, who are familiar with the situation that governs conditions which have increased the poultry products of this country from a mere pittance to over \$500,000,000 per year, can understand.

Mites and Hawks—Two Chicken Enemies.

In his lectures before the students of the Agricultural Department of the University of Missouri last week, T. E. Orr, Secretary of the American Poultry Association, gave methods of combating mites and chicken-hawks, that might easily be used by every Missouri housewife.

Mites, he says, may be gotten rid of

**DON'T SEND EAST**

for your Single Comb Brown Leghorns. In four shows this season I have won 15 out of 19 blue ribbons competed for, and in three of these shows have had highest scoring bird in the show. Scores as high as 95% by Owen and Atherton and 94% by Rhodes. Stock for sale. Eggs, \$1 for 12; \$5 for 100.

CHAS. C. SMITH, Manhattan, Kansas.

**The "QUEEN" Is not an incubator but the Incubator****THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC**

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the **QUEEN**. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

**NEW and RECENT POULTRY BOOKS****The New Egg Farm**

By H. H. Stoddard. A practical, reliable manual upon producing eggs and poultry for market as a profitable business enterprise, either by itself or connected with other branches of agriculture. It tells all about how to feed and manage, how to breed and select, incubators and brooders, its labor-saving devices, etc., etc. 140 original illustrations. 331 pages. 5x7 inches. Cloth.\$1.00

Turkeys and How to Grow Them

Edited by Herbert Myrick. A treatise on the natural history and origin of the name of turkeys; the various breeds, the best methods to insure success in the business of turkey growing. With essays from practical turkey growers in different parts of the United States and Canada. Illustrated. 154 pages. 5x7 inches. Cloth.\$1.00

Poultry Architecture

Compiled by G. B. Fiske. A treatise on poultry buildings of all grades, styles and classes, and their proper location, coops, additions and special construction; all practical in design, and reasonable in cost. Over 100 illustrations. 125 pages. 5x7 inches. Cloth.....\$0.50

Poultry Appliances and Handicraft

Compiled by G. B. Fiske. Illustrated descriptions of a great variety and styles of the best homemade nests, roosts, windows, ventilators, incubators and brooders, feeding and watering appliances, etc., etc. Over 100 illustrations. Over 125 pages. 5x7 inches. Cloth.....\$0.50

Poultry Feeding and Fattening

A handbook on the standard and improved methods of feeding and marketing all kinds of poultry, covering all branches, including chickens, broilers, capons, turkeys, water fowl; how to feed under various conditions and for different purposes. Illustrated. 160 pages. 5x7 1-2 inches. Cloth.....\$0.50

American Standard of Perfection

A complete description of all recognized varieties of fowls, as revised by the American poultry association at its twenty-eighth annual meeting. It contains all changes in and additions to the constitution and by-laws, and the text of the standard, as authorized to the present time. Illustrated 900 pages. 5 1-2x8 inches. Cloth, net.....\$1.50

THE KANSAS FARMER CO.

Topeka, Kansas

by spraying the chicken-house with a mixture of one part crude carbolic acid and eight parts of carbon oil. This mixture he recommends in preference to mite exterminators sold by traveling agents.

Hawks, he claims, may be kept out of the poultry-yard by attaching bright pieces of tin, six by ten inches, to the trees and poles surrounding the quarters, by strings two feet long, so that the wind will make the bright metal dance in the sunlight.

Won a Moral Victory.

Miss Clara Logan, the Queen Titania of the Asbury Park baby parade, sat by a log fire, telling stories of children.

"A woman," she said, "reclined on a couch in her library one night with the light low, trying in vain to go to sleep.

"Beside her, on a table, was a dish of fine fruit.

"As she lay there she saw her little daughter tiptoe into the room in her long, white nightgown. The child, thinking her mother asleep, advanced cautiously to the table, took a bunch of grapes and stole out again.

"The mother was grieved at such misconduct on the part of her good little daughter, but she said nothing.

"Five minutes passed. Then back into the room crept the child, the grapes in her hand, untouched. She replaced them on the dish, and, as she departed, her mother heard her mutter:

"That's the time you got left, Mr. Devil."

It is a maxim, that those to whom everybody allows the second place have an undoubted title to the first.—Swift.

Man makes a death which nature never made.—Young.

Good Hatches Promised

It's a pleasure to hatch lots of chicks in a HATCH-ALL INCUBATOR. Pure air, even heat, little care, simple directions make it easy for beginners or for experienced to make money on poultry. Write for free catalog to HEBRON INCUBATOR CO., Box 18, Hebron, Neb.

Our Money-Back Guarantee

Every incubator we sell absolutely guaranteed to do all we claim. The 1906 Reliable is the only incubator with double heating system. Free catalog tells all about it. Pure-bred Poultry and Eggs for hatching. Ask for prices.

Reliable Incubator & Brooder Co., Box B-62 Quincy, Ill., U.S.A.

SHOEMAKER'S BOOK ON POULTRY**AND ALMANAC FOR 1906.**

There is nothing in the world like it. It contains 224 large pages, handsomely illustrated. A number of most beautiful colored plates of fowls and other birds. It tells all about all kinds of *The Thoroughbred Fowls*, with life-like illustrations, and prices of same. It tells how to raise poultry successfully and how to treat all diseases common among them. It gives working plans and illustrations of convenient Poultry Houses. It tells all about Incubators and Brooders.

It gives full instructions for operating all kinds of incubators. This chapter is marvelously complete and worth dollars to anyone using an incubator. It gives descriptions and prices of incubators, brooders and all kinds of poultry supplies. In fact, it is an encyclopedia of chickdom and will be mailed to anyone on receipt of only 16 cents. Your money returned if not pleased.

C. C. SHOEMAKER, Box 408, FREEPORT, ILL.

Take Your Old Trusty Incubator

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and so good chicks—why it is so easy to operate—it is so economical. It is sold on 40, 60 or 90 day trial, freight prepaid. Write to us.

M. M. Johnson Co., Clay Center, Kans.



Dairy Interests

Balanced Rations for Cows.

Will you please give me the cheapest balanced ration for dairy cows from the following feeds and prices.

Please send me bulletin No. 115, and put my name on your mailing list.

Corn, shelled, per bu.....	\$ 0.36
Kafir-corn, seed, per bu.....	0.60
Oats, per bu.....	0.35
Bran, per ton.....	17.50
Oil meal, per cwt.....	2.25
Alfalfa hay, per ton.....	7.00
Kafir-corn fodder, per ton.....	3.50

Mitchell County. W. H. MEARS.

From the prices of the feeds given, the values per pound are easily calculated and found to be:

	Cents.
Corn .....	.64
Kafir-corn seed	1.07
Oats	1.10
Bran .....	.875
Oil meal	2.25
Alfalfa	7.00
Kafir-corn stover .....	.175

As Kafir-corn grain and corn are about equal in feeding value, with the advantage in favor of corn, we may at once cut out the former as too expensive at 60 cents per bushel. Kafir-corn fodder is your cheapest feed but it is not at all adapted to milk-production unless balanced by some highly nitrogenous feed. We can not see at a glance whether or not it will be economical to use it when so balanced. I am sending you a copy of Bulletin No. 115, and in Table IV, beginning on page 130, you will find about 2,700 balanced mixtures ready calculated for various purposes in feeding. Pages 128-9 give an explanation of the table and from the data which it contains you should be able to calculate for yourself what rations would be cheapest. However, to assist you I will calculate the cost of a few.

Let us begin with corn and alfalfa; that will certainly be a combination hard to beat for economy and efficiency. You do not say how much milk your cows are giving, but if we assume a nutritive ration of 1:6 for their ration we shall not be far wrong. That would be right for cows giving about sixteen pounds of milk per day. Turning to page 144 of the bulletin, we find under nutritive ratio 1:6 that corn and alfalfa must be used in the ratio of 30.8 of the former to 45.6 of the latter. If we add these two quantities together and divide each by the sum, it will give us the quantities of each to be taken for one pound of the ration. Thus: $30.8 + 45.6 = 76.4$; $30.8 \div 76.4 = 0.4$, and $45.6 \div 76.4 = 0.6$. Hence four-tenths of a pound of corn with six-tenths of a pound of alfalfa hay will give one pound of a ration with the nutritive ratio 1:6. From this you can easily calculate how much of each to weigh off for large amounts.

For each thousand pounds weight of herd you will need about 27.5 pounds per day in the ration. If in each pound there are four-tenths of a pound of corn, there will be $0.4 \times 27.5 = 11.0$ pounds of corn in 27.5 pounds of the daily ration, and $0.6 \times 27.5 = 16.5$ pounds of alfalfa. This, you notice, is a very good ratio between the grain and the roughage. The cost would be: $11 \times 0.64 = 7.1$ cents for the corn, and $16.5 \times 0.35 = 5.8$ cents for the alfalfa hay; total, 12.9 cents per day, per thousand pounds weight of herd.

In a similar manner, by making the calculations for other possible combinations of the feeds you name, we obtain the results exhibited in the following table:

Amount and cost of feeds balanced to a nutritive ratio of 1:6, and in quantities to make 11 pounds of concentrate and 16.5 pounds of roughage.

Balanced No. feeds.	Pounds of each feed.	Total pounds.	Cost of each feed.	Total cost of weight stated.
1. Corn	11.0	..	7.1	..
Alfalfa	16.5	27.5	5.8	12.9
2. Corn	8.6	..	5.5	..
Oil meal	2.4	11.0	5.4	10.9
3. Alfalfa	9.7	..	3.4	..
Kafir-corn stover	6.8	16.5	1.2	4.6
4. Corn	4.5	..	2.9	..
Bran	6.5	11.0	5.7	8.6
5. Bran	16.0	..	14.0	..
Kafir-corn stover	11.5	27.5	2.0	16.0
6. Oil meal	5.3	..	11.9	..
Kafir-corn stover	22.2	27.5	3.9	15.8

In the above table I have balanced Kafir-corn stover, your cheapest roughage, with the only three feeds which you name that will do, and I have balanced corn, your cheapest concentrate, with the only three of your feeds that can be used. To facilitate the compari-

son I have calculated them all to 11 pounds of concentrate and 16.5 pounds of roughage where possible, and to 27.5 pounds where the ration contains both the concentrate and roughage. In ration 3, the Kafir-corn fodder is balanced by alfalfa and the roughage ration of 16.5 pounds would cost but 4.6 cents. Either mixture, 2 or 4, could be used with it as a grain ration. Eleven pounds of the corn and oil-meal mixture would cost 10.9 cents, while the corn and bran mixture would cost but 8.6 cents. Adding together Nos. 3 and 4, you see that a ration consisting of 9.7 pounds of alfalfa, 6.8 pounds of Kafir-corn stover, 4.1 pounds of corn and 6.5 pounds of bran would cost 13.2 cents. It is therefore slightly dearer than the ration consisting of corn and alfalfa only. With this combination, however, you have the advantage of having the concentrate balanced within itself, and the roughage also balanced in the same way. If you wish to feed less or more concentrate than 11 pounds you can do so without disturbing the balancing of the ration in respect to protein and non-protein. This affords a convenient means of modifying the feed for individual animals. It is possible, too, that the greater variety afforded by this ration would give better results than the simpler one consisting of corn and alfalfa alone. You will readily see that Nos. 2 and 4 might be used as a part of the ration consisting mainly of No. 1.

No. 5 would be balanced, but has too much bran and too little stover for a practical feed; its cost, 16 cents, is almost the same as No. 6, which is scarcely practical either, requiring so large an amount of oil-meal. In any case Nos. 5 and 6 are cut out by their higher prices, though the two added together would make a double ration which would be about right in the relative amounts of concentrates and roughage. Reducing it to the same basis as the others, it would consist of 8 pounds of bran, 2.65 pounds of oil-meal, and 16.8 pounds of Kafir-corn stover.

I can not often give time to make such detailed calculations as the above, but in this case the question was so clear-cut, and the feeds so practical that it seemed to have more than ordinary interest. I should say in respect to the oats that they are in themselves practically a balanced ration for your cows, but at 35 cents a bushel are considerably more costly than the rations we have been considering. If you wish to use some for variety, you could replace part of the other ration by them.

J. T. WILLARD.
Manhattan, Kas.

Managing a Winter Dairy.

To achieve the highest degree of success in the management of a dairy at any time in the year, one should know the requirements and possibilities of each individual cow. The man to whom every dairy animal is only a cow, has yet to learn the first lesson in his business. The proper beginning, then, is to know the herd with which we have to deal.

I believe October and November are good months in which to have the cows come fresh. August and September abound in flies, in short pastures, and in labor upon the farm. They, therefore, constitute an opportune season for the cow's vacation. From four to six weeks is long enough, as a rule, for the animal to rest. As she nears the period of freshening, care should be given to her ration. Since the discovery of the new air treatment for milk fever, the danger of overfeeding at this time has been largely removed. There is no other period in the life of a cow when it

"CHEAPEST" AND "BEST" CREAM SEPARATORS

More truly is the best the cheapest in the purchase of a cream separator than in the purchase of any other farm machine. The really cheap cream separator is the one which will perform your work in the most profitable and satisfactory manner, and last the greatest number of years. Basing the value of the separator upon durability, without considering quality of work, if it lasts but two years it is worth only one-fifth of what the separator is that lasts ten years, and one-tenth of what the one is that lasts twenty years. In addition, if it loses a large percentage of cream and is difficult and expensive to operate its value is placed at even a still lower level. DE LAVAL cream separators are today admitted by every experienced user to do as near perfect work as a cream separator possibly can. Proof of this is seen in the fact that over 98 per cent of the world's creameries and all largest users employ the DE LAVAL exclusively. As to durability, the DE LAVAL has an average life of twenty years. The very best of other separators do not last over eight or ten years at the very longest, and the poorest generally become worthless in from six months to two years. At the same time these machines are incapable of doing perfect work except under ideal conditions, such as cannot possibly be had in farm use,—otherwise they lose a large percentage of the cream, are hard to operate, and in reality are but little better than gravity setting systems. It is therefore seen how little the first cost of a cream separator really means. The cost in the end is what counts. All in all considering dollar for dollar value, a DE LAVAL machine gives from five to ten times more true separator worth than any other machine on the market today. These are not mere paper claims but facts, proof of which can be had for the asking.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts., CHICAGO. General Offices: 109-113 Youville Square MONTREAL.
1213 Filbert Street. 74 CORTLANDT STREET, 75 & 77 York street, PHILADELPHIA. TORONTO.
9 & 11 Drumm Street. NEW YORK. 14 & 16 Princess Street SAN FRANCISCO WINNIPEG.

Cream is Cash

AT
The largest exclusive Cream Butter
Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business. Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in **Cash**.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.

PEERLESS CREAM SEPARATORS

Reasons Why the PEERLESS Is the best

FIRST—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

SECOND—Compound feature, two bowls in one, hollow bowl and disk bowl combining all the features of the tubular and disk machines.

THIRD—Enclosed frame. Free from dust. Injury resulting from machine impossible.

FOURTH—Perfectly noiseless.

FIFTH—Heavy enough and strong enough to lift a box-car, which insures durability.

SIXTH—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-1000 of an inch.

SEVENTH—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the PEERLESS machine. Each busing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at a small cost.

EIGHTH—at normal temperature the skimmed milk will always show less than 5-100 of 1 per cent butter fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

Bradley, Alderson & Company

Kansas City, Missouri

10th and Hickory

The Apiary

Different Races of Bees.

EDITOR KANSAS FARMER:—During the last several years a number of different varieties of honey-bees have been imported into the United States, such as the Cypriots, Carniolans, and more recently the Caucasians. In 1860 the Italians were introduced, and in 1864 I probably introduced the first Italian queen into the State of Indiana. I tested their merits side by side with the black, or German bees, which were the first bees brought to this country. I found the Italians superior to the blacks in the methods of defense against the bee-moth. They remained almost perfectly quiet on the combs, were gentler when being handled, and were harder. But I find that since the importation of Cypriots by queen-breeders, they have become in many cases crossed with these bees, and are much crosser when being handled than they were before thus being crossed. The Carniolans have also crept into the queen-breeding apiaries, and through crosses have increased the swarming inclinations of the Italians in many cases, which is at present one of the greatest evils that honey-producers have to contend with. None but populous colonies of bees are profitable to their owners as honey-collectors. The Carniolans, being most persistent swarmer, are on this account undesirable. The Caucasians resemble very much the common black bee, but it is claimed that they are much more docile in handling than any other race of bees known. I had a conversation with Professor Benton who has charge of the Bee-keeping Experimental Station at Washington, D. C. He is, however, absent at present, being in the far East in search of the large stingless bees found in the East Indian country. Professor Benton informed me that as far as tested, the Caucasians bid fair to become desirable bees. I have one Caucasian queen introduced late last fall, but she is mated so that her worker progeny will not prove fully what their merits may be. I will, however, try to observe as far as possible the difference, if any, in disposition from the Italians I have, but I shall not permit one of her drones to hatch out as I do not wish Caucasians crossed with my Italians at all. The drones of the queen will be pure as the fertilization of the queen does not in the least affect the purity of her drone progeny. My objection to crossing the Caucasians with the Italians is that I shall not believe them superior in any way to the Italians I now have until actual demonstration proves them so, and I will drop a word of warning to all our bee-keepers to proceed with caution in the matter of introducing the Caucasians. Also steer clear of the Cypriots and Carniolans or any strain of Italians that are very cross, as it is almost positive proof of a cross with Cyprian blood. The inclination to profuse or oft-repeated swarming shows the presence of Carniolan blood. But natural swarming is not permitted to any considerable extent in any well-managed modern apiary. Artificial swarming is practiced almost entirely for an increase of colonies. To get all there is in bees, it is necessary to have the colonies strong in numbers when the honey flow or season begins, so that there will be a force to collect and store it.

In the matter of purchasing Italian queens, caution should be used to get queens from the most reliable queen-breeders. I have no queens for sale as I am not now a breeder of queens for the market.

G. BOHRER.

Rice County.

Farm Notes.

Fattening animals should never be allowed to become hungry; nor, on the other hand, should they be fed too heavily. Too heavy feeding clogs the appetite and too long periods between feeds makes the animals restless.

The potato lot should be of rich, mellow soil, plowed deep and thoroughly prepared before planting the seed. Then give clean, thorough cultivation during growth.

While it is conceded that more stock can be kept on an acre by cutting the feed than by pasturing the same acre, yet the extra labor, unless the land is very high priced, will much more than balance this.

This Custom Is Now General.

It has now become a general and also a safe rule to demand brands of goods that are well known and have a reputation for quality and reliabil-

ity. Nowadays the manufacturers of good goods, inform consumers of this fact and point out that safety lies in buying the brands that bear their names and trade-marks.

In this respect the Mayer brands of shoes are deserving of special mention. Our readers have no doubt become familiar with these shoes and know of their excellent wearing quality by actual use. The Mayer factory turns out shoes suitable for every member of the family and for all uses, Sunday shoes and every day shoes, and they are known throughout the broad expanse of our land as the shoes of style and quality.

The "Honorbilt" are very popular fine shoes for men and "Western Lady" shoes embody the fit and style demanded by well-dressed ladies. For extreme comfort "Martha Washington" shoes are highly recommended. Please bear this in mind when next buying shoes.

Mail Order Banking.

Under our banking system, business men everywhere find it to their advantage to make remittances by checks, rather than by bank drafts, post office or express money orders. There are several good reasons for this, but the two principal ones are these:

(1) The convenience in paying a bill by simply writing out a check, thus making it a great time-saver as well.

(2) It gives the most satisfactory form of receipt for the payment made.

The farmer has become a business man. In the progress he has made made within the past ten years he has found it necessary, and greatly to his



GEORGE W. YORK. LOUIS P. SCOVILLE.

profit and convenience to handle his own financial affairs, rather than trust them to the local banker, lawyer or merchant. Our agricultural colleges, farm institutes, and great conventions, that relate to agriculture in various forms, have all advocated the importance of the farmer paying more attention to the financial end of his business. Instead of being isolated from the great commercial centers, as was the case in the earlier days, he has, through the means of modern transportation facilities, rural mail routes, telephones and interurban railways, become very closely identified with these great centers. His home is his business office, and instead of spending time driving considerable distances to his local town and making expenditures for things that many times he does not want, he has brought to his home the great mail order catalogues, and when he wants to make his selection, which is usually done in conference with the whole family on a rainy day, or in the evening, he simply writes his order, encloses a check, and the mail order merchant does the rest.

A recent difficulty has arisen with reference to personal checks, because of the excessive exchange charge imposed by local banks. The local banker is usually biased in favor of the local merchant, because he is his best customer. The farmer who wants to save from 25 to 50 per cent on his purchases—which he can do through the modern mail order method of buying—finds his local bank a bank of deposit only. How much better it would be for the farmer to make his deposits in a bank in a great mail order center like Chicago. Banking by mail has become an established fact, and to keep progress with the great mail order movement, the Ravenswood Exchange Bank, of Chicago, Ill., has arranged to carry farmers' accounts, allowing them to draw their checks on this bank for their purchases, which will be accepted anywhere without exchange. This will be a great convenience to farmers everywhere.

Mail order merchandising is conducted in the city of Chicago to the amount of \$200,000,000 annually.

Chicago is the greatest live stock market in the world. Many of our farmers make direct shipments to commission houses at the Union Stock Yards and receive checks in return. It can be arranged to have these checks sent to this bank for deposit to the account of the farmer without exchange charges.

Chicago is likewise the great produce center, and commission houses here are remitting millions of dollars annually to the farmers direct. By the plan proposed, the farmer can have this placed to his deposit and receive the credit note from the bank.

Chicago is also the great grain market and the same rule applies in that case.

This mail order banking proposition is best explained through the literature the Ravenswood Exchange Bank, of Chicago, Ill., will send to any one asking for it.

The Ravenswood Exchange Bank is composed of men who have had agricultural experience and are familiar with the requirements of the farmer along banking lines. The president, Mr. Louis P. Scoville, under whose direct supervision the mail order business is conducted, is a director in White's Class Advertising Co., an advertising agency that handles extensively agricultural advertising accounts, and is thus placed in close touch with the great consuming interests of the country.

Mr. George W. York, a director of the bank, is also treasurer of White's Class Advertising Co., and has had more than twenty years' experience in business lines directly affecting important branches of agriculture. He is publisher, likewise, of the American Bee Journal, the oldest bee paper in

GET THE BEST-TOWERS' SURFACE CULTIVATORS
for corn, kaflir-corn, cotton, tobacco, sorghum,
& potatoes, beets and other vegetables.
THREE SIZES: for two rows or one row—three
horses, two horses or one horse. Kill the weeds;
nurture the roots of growing plants; preserve mois-
ture; cause full filling of grain; increase yield
ten per cent and up. **FREE** Treatise on Surface Cultivation.
Introductory prices where we have no agents.
J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

J. D. Strickler.

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; bromo grasses; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

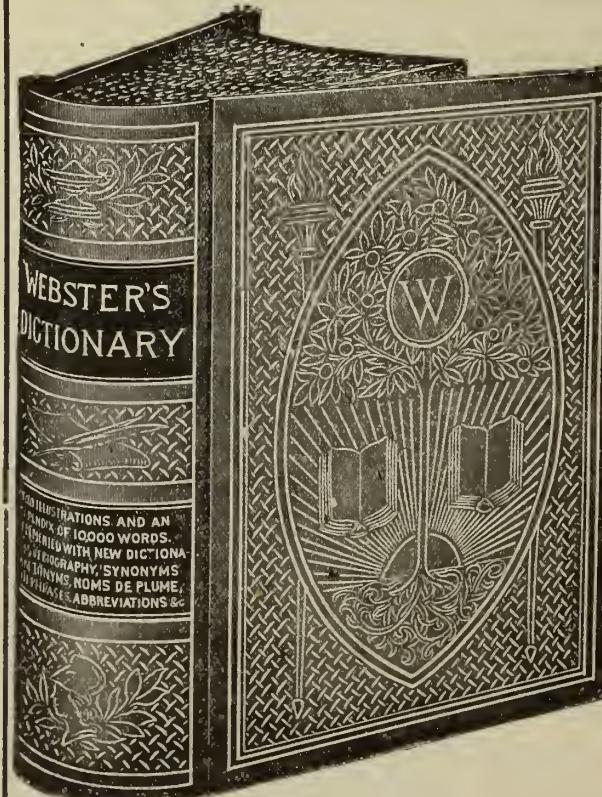
Illustrated, 5x7 inches, 248 pages. Cloth Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA.

KANSAS

OUR GREAT DICTIONARY OFFER.



New
Census
Edition

Full
Sheep
Binding

Thumb
Indexed

Regular Price, \$9.00

We are now enabled to offer our readers This Great Work and the Kansas Farmer for one year for only

\$2.75

Send Cash or Money Order to

Kansas Farmer Co., Topeka, Kans.

America, with which he has been connected for twenty-two years.

Mr. Frank B. White, president of White's Class Advertising Co., who is well known by the agricultural fraternity because of his long service in connection with the advertising business, always a specialist in agricultural lines, has this to say about this plan intended for farmers to conduct their banking by mail:

"I most heartily approve of the plan proposed by the Ravenswood Exchange Bank to conduct a banking business by

mail, particularly in behalf of farmers. Both Mr. Louis P. Scoville and Mr. George W. York are interested in my company, and I know them to be thoroughly competent, honorable, safe and conservative. I am also acquainted with the vice-president, Dr. W. C. Abbott, whom I know to be a successful publisher and manufacturer, and who has recently become interested in this splendid institution. I am sure that the plan they propose is going to be of great advantage to the farmers everywhere, because of the convenience and

THE KANSAS FARMER

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run at the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

HOLSTEIN—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Heather Eclipse 3876 in service. A. L. Wynkoop, Benda, Kans.

FOR Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th; also car high grade yearling bulls. Duff & Sons, Horton, Kansas.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

SELDON STOCK FARM OF SHORTHORN CATTLE Our herd was established 18 years ago in Iowa. In our herd are such families as Young Mary, White Rose, Pomona, Secret, Arabella, Lady of Athol, Dulcibella, Young Phyllis, etc. We have only four young bulls left. Write us for prices. HOADLEY & SIGMUND, Selden, Kansas. Mention Kansas Farmer.

scene of a fierce conflict, but since provisions have gotten up so high the market shows more life and less resistance from the packers. Pork has passed the \$16 mark, and Saturday's hog market was the best of the year, top \$6.37 1/2. Market is 5¢ lower to-day, top \$6.32 1/2, bulk \$6.20 @ 6.30, supply 6,000. It is believed the market will break as soon as shipping conditions become normal in the country, because of the big runs then.

Sheep and lambs weakened 10@15 last week, although receipts were moderate at 31,600 head. Supply to-day is 16,000, market 5@10c lower, lambs selling at \$5.80 @ 6.40, wethers and yearlings \$5.35 @ 5.75, choice yearlings would bring \$5.90. ewes \$4.25 @ 5.25. Some 53-pound lambs sold at \$5.30 for the country last week, and some partly finished lambs, 67 pounds, were taken out at \$6. J. A. RICKART.

South St. Joseph Live Stock Market. South St. Joseph, Mo., March 26, 1906.

An unusually heavy proportion of beef steers were included in the cattle supply last week, and the market on that class was lower Tuesday and Wednesday, but regained strength Thursday and Friday, closing the week with only a small loss. Circulars were sent out announcing a decline of 15@25c, but best authorities declare that prices for the week averaged only a shade under previous week, and closed up right at the highest point of the winter. At the worst time, light steers sold nearly steady, main weakness being shown on heavy cattle. Cows, heifers, and bulls continue scarce and stronger, and stockers and feeders took a spurt upward on account of the very small supply offered, rather than any improvement in condition of country roads, feed lots or pastures.

The cattle run to-day is 10,000 head, same as last Monday. The run last week was 38,100 head, smallest week this year. Market is steady on beef steers to-day, butcher cattle strong, also stockers and feeders in better demand. The rain last night, and warmer weather this week will soon settle the mud, and a sharp trade in country grades is looked for this week. The top steers last week sold at \$5.75, top to-day \$5.30, bulk of steers \$4.60 @ 5.25, very few steers below \$4.50, top heifers \$5.15, most of the good heifers \$4.35 @ 4.75, top cows \$4.65, bulk \$3.25 @ 4.25, bulls \$3.25 @ 4.25, veals up to \$7 again, stockers and feeders mostly at \$3.40 @ 4.50, a few cattle both below and above these prices, fancy feeders \$4.90 @ 5. The hog market continues to be the

was quickly absorbed at steady to strong prices.

The moderate supply of hogs was made up of the best quality seen here in the last two or three weeks. The demand was pretty good, but with Chicago having nearly 60,000 and reporting a big break, sellers here were compelled to accept the decline at right to be compared with last week's closing figures, the bulk selling at \$6.20 @ 6.27 1/2 with top at \$6.30. These prices are considerably higher than a week ago, and the market appears to be in very good condition.

The receipts of sheep were fairly liberal, although not nearly as large as a week ago. The live markets reported less than 6,000 less than last Monday, the demand was quite good, and with quality running better than it did on the closing days of last week, the market showed quite lively movement with prices steady to strong, best lambs selling at \$6.45, with bulk at \$6.25 @ 6.40, and good fat ewes sold at \$6.25 and were considered strong. The market is hardly in condition to stand a repetition of the enormous receipts of last week.

CATTLE.

saving, and furthermore because of the interest to be paid on deposits, all of which they explain in their literature."

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals a la carte. Ask for tickets via the Nickel Plate Road. Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

The Fairbanks-Morse Company is always progressive. In order to meet a demand from up-to-date farmers, it has lately devised and put upon the market an electric-light and power plant to be run by its gasoline engines and especially adapted for farmers use. This plant is arranged to light the house and farm-buildings, or to be applied as power, in pumping, sawing wood, feed-grinding and other farm-work where power is needed. This firm has lately sent Prof. B. F. Eyer, of the department of physics and electrical engineering of the Kansas Agricultural College, two machines of this type to be tested. One of these is a nine horse-power, gasoline electric machine and the other is of two horse-power. When these machines have been thoroughly tested, the KANSAS FARMER will publish results.

Quick Meal Chick Feed is a dry feed in which there is practically no waste. It contains cracked and broken grains of all sorts. Millet, rape, and other small seeds, beef, bone and grit, charcoal and other choice ingredients and does not induce over-gorging or clogging, but tends to produce rugged, hardy chicks, always ready for their ration. Yes, it contains some grit because grit is just as necessary to the chicken as teeth are to other animals. They need the grit to digest their feed and this is admitted by every known authority on chicken feeding. The Steinmesch Co. has issued a neat booklet which explains the advantage of using this valuable feed, and may be had by addressing Steinmesch Feed & Poultry Supply Co., St. Louis, Mo.

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 91 cars; Saturday's inspections were 31 cars. The larger offerings and weak future markets made carlots sell slowly. A few cars of choice milling wheat brought steady prices, but the remainder averaged 1c lower. The sales were: No. 2 hard, 1 car choice yellow 82c, 1 car 77 1/2c, 3 cars 77c, 1 car 76 1/2c, 1 car 76 1/2c; No. 3 hard, 1 car 75 1/2c, 3 cars 75c, 2 cars 74c; No. 4 hard, 1 car 68c, 1 car 67 1/2c, 1 car 67 1/2c, 1 car 64c; rejected hard, 3 cars 64c; No. 2 mixed, 1 car 80c; No. 3 mixed, 1 car 77c; No. 4 mixed, 1 car 64c, 1 car 62 1/2c; No. 2 red, 2 cars 94c; No. 3 red, nominally 86@91c; No. 4 red, 1 car 87c, 1 car 85c, 1 car 83c.

Receipts of corn were 54 cars; Saturday's inspections were 16 cars. Carlot arrivals were large enough to depress prices about 1/2c. The demand was moderate. The sales were: No. 2 white, 5 cars 42 1/2c; No. 3 white, 10 cars 42c; No. 2 mixed, 3 cars 41 1/2c, 3 cars 41 1/2c; No. 3 mixed, 7 cars 41 1/2c; No. 2 yellow, 4 cars 42c.

Receipts of oats were 29 cars; Saturday's inspections were 7 cars. There was a fair demand, and prices held up well considering the increased offerings. Sales were made as follows: No. 2 white, 4 cars 32c, 1 car 31 1/2c; No. 3 white, 1 car 31c, 2 cars 30 1/2c, 1 car color 30 1/2c; No. 4 white, 1 car 30 1/4c; No. 2 mixed, nominally 30@30 1/2c; No. 3 mixed, 1 car 29 1/2c; No. 4 mixed, 2 cars 29 1/2c.

Barley was quoted 39@40c; rye, 56@58c; Kafir-corn, 65@66c per cwt.; bran, 86@88c per cwt.; shorts, 90@95c per cwt.; corn chaff, 80@82c per cwt.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo.

Monday, March 26, 1906.

An unusually heavy proportion of beef steers were included in the cattle supply last week, and the market on that class was lower Tuesday and Wednesday, but regained strength Thursday and Friday, closing the week with only a small loss. Circulars were sent out announcing a decline of 15@25c, but best authorities declare that prices for the week averaged only a shade under previous week, and closed up right at the highest point of the winter. At the worst time, light steers sold nearly steady, main weakness being shown on heavy cattle. Cows, heifers, and bulls continue scarce and stronger, and stockers and feeders took a spurt upward on account of the very small supply offered, rather than any improvement in condition of country roads, feed lots or pastures.

The cattle run to-day is 10,000 head, same as last Monday. The run last week was 38,100 head, smallest week this year. Market is steady on beef steers to-day, butcher cattle strong, also stockers and feeders in better demand. The rain last night, and warmer weather this week will soon settle the mud, and a sharp trade in country grades is looked for this week. The top steers last week sold at \$5.75, top to-day \$5.30, bulk of steers \$4.60 @ 5.25, very few steers below \$4.50, top heifers \$5.15, most of the good heifers \$4.35 @ 4.75, top cows \$4.65, bulk \$3.25 @ 4.25, bulls \$3.25 @ 4.25, veals up to \$7 again, stockers and feeders mostly at \$3.40 @ 4.50, a few cattle both below and above these prices, fancy feeders \$4.90 @ 5. The hog market continues to be the

was quickly absorbed at steady to strong prices.

The moderate supply of hogs was made up of the best quality seen here in the last two or three weeks. The demand was pretty good, but with Chicago having nearly 60,000 and reporting a big break, sellers here were compelled to accept the decline at right to be compared with last week's closing figures, the bulk selling at \$6.20 @ 6.27 1/2 with top at \$6.30. These prices are considerably higher than a week ago, and the market appears to be in very good condition.

The receipts of sheep were fairly liberal, although not nearly as large as a week ago. The live markets reported less than 6,000 less than last Monday, the demand was quite good, and with quality running better than it did on the closing days of last week, the market showed quite lively movement with prices steady to strong, best lambs selling at \$6.45, with bulk at \$6.25 and were considered strong. The market is hardly in condition to stand a repetition of the enormous receipts of last week.

SWINE.

FOR SALE—One roan and two red yearling registered Shorthorn Bales bulls. Splendid individuals. C. G. Cochran & Sons, Linville, Kansas.

RED POLLED BULLS—Five bulls 9 to 12 months old, for sale cheap. Nice ones, registered. H. L. Pelett, Endon, Kansas.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGREE SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Crickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26-quart cows, and all winners. Sire Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Blvd., Kansas City, Mo.

HORSES AND MULES.

FOR SALE—Or will trade for a good span of 3- or 4-year-old Percheron mares—a good jack coming 7 years old, a good breeder and the best positioned jack I have ever seen. Will take \$300 cash if taken soon. I also have two thoroughbred Duroc-Jersey bams, \$15 each. R. G. Williamson, Edwardsburg, Kans.

FOR SALE CHEAP—Fine young trotting-bred stallion, by Flood Wilkes. J. E. Brechinbill, Detroit, Kans.

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,300 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE OR TRADE—for stock cattle, two Jacks coming 3 years old, 15 1/2 hands high; weight 950 pounds; also one 4 year old jack 14 hands high. Good performers. Also pausing-bred stallion by Silkwood, 16 1/2 hands high, weight 1,250 pounds. Address J. C. Hentzler, R., Topeka, Kans.

FOR SALE OR TRADE—One good black Jack, with white points, 15 1/2 hands high, 7 years old, a good individual and a good breeder, or will exchange for good dairy or pure-bred beef cattle. Address John L. Stanley, Nyhart, Bates Co., Mo.

FOR SALE—at reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35c; 1,000, \$2.25. Raspberries, 100, 70c; 1,000, \$6. Blackberries, 100, 70c; 1,000, \$5. Grape, 2 year, 5c. Currents and gooseberries, per 10, 50c. Asparagus, 100, 40c; 1,000, \$2.25. Rhubarb, 10, 50c; 100, \$2.25. Gladiolus bulbs per 10, 10c; 100, 75c. Dahlias, per dozen 75c. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Spring Nurseries, Bonner Springs, Kans.

SIXTY-DAY OATS—Reclined, \$2.00 per 100 lbs. sacked. C. E. Cheevey, Manchester, Kans.

FOR GOOD SEED—Spezz, reclined and fanned by hand. Write Adams & Walton, Osage City, Kan.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SMALL FRUIT PLANTS—For price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Son, Route 9, Lawrence, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes six kinds. Price on application; also a fine lot of eating sweet potatoes. T. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety." Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State Corn-breeders' contest 1906, Won 1st and 2d prizes for the most productive acre 103 and 78% bushels. Write C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

was quickly absorbed at steady to strong prices.

The moderate supply of hogs was made up of the best quality seen here in the last two or three weeks. The demand was pretty good, but with Chicago having nearly 60,000 and reporting a big break, sellers here were compelled to accept the decline at right to be compared with last week's closing figures, the bulk selling at \$6.20 @ 6.27 1/2 with top at \$6.30. These prices are considerably higher than a week ago, and the market appears to be in very good condition.

The receipts of sheep were fairly liberal, although not nearly as large as a week ago. The live markets reported less than 6,000 less than last Monday, the demand was quite good, and with quality running better than it did on the closing days of last week, the market showed quite lively movement with prices steady to strong, best lambs selling at \$6.45, with bulk at \$6.25 @ 6.40, and good fat ewes sold at \$6.25 and were considered strong. The market is hardly in condition to stand a repetition of the enormous receipts of last week.

WARRICK.

POULTRY.

FOR SALE—20 good strong spring and yearling Berkshire hens that are just what the farmers want. Prices right. Address E. W. Melville, Emporia, Kans.

LIGHT BRAHMA EGGS from prize-winning birds, \$1.25 for 15; \$2 for 30; \$2.50 for 45; \$5 for 100. Carefully selected. N. Van Buskirk, Blue Mound, Kansas.

REAL ESTATE.

BOTTOM FARM FOR RENT—A fine, fertile bottom farm, 80 acres, 6 miles from Topeka, convenient to school and church. Possession at once. Land suited to any crop. Address Room 6, Office Block, Topeka, Kansas.

FOR SALE—Coal land, farms, and timber. The place for a poor man to get a home. Campbell, box 1453, Fort Smith, Ark. Real estate man need not apply.

FOR SALE—A good wheat farm of 320 acres; 120 acres in wheat. Good improvements. Twenty dollars per acre; \$25 cash, the rest in yearly payments. Two miles north of Ellis. Address Jno. Yobshi, Ellis, Kansas.

FOR SALE—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

READ, CONSIDER, COME, OR WRITE—80 acres of good land, with nice, comfortable buildings, \$2,200. 160 acres, 120 cultivated, good land for corn, wheat, and alfalfa, new \$400 barn, good five room house, close to school and town, \$4,200. 240 acres, well improved, all good land, \$6,000. Small payment down, balance to suit. 320 acres improved, one-half bottom, will grow any farm crop, \$6,000. 480 acres, 15 acres tame grass, fine improvements, \$10,000. 653 acres, bottom and second bottom, fine improvements, one mile from town, timber, alfalfa, orchard, water, hog fence, easy terms, \$25,000. We have a large list of all sizes and kinds. Write for list, at once. Minneapolis, Florence, or Salina, Kans. Garrison & Studebaker.

400-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realty Co., Clay Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect, and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

160 ACRES—ALL BROKEN—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—ALL FENCED—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Plainville, Kansas.

GEO. M. NOBLE & CO.
Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice, Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
819 Wainwright, St. Louis.

H. C. BOWMAN,
SHAWNEE COUNTY FARMS.
TOPEKA RESIDENCE AND MERCANTILE PROPERTY.
VACANT LOTS.
TEXAS RANCH LANDS,
42 Columbian Bldg., Topeka, Kans.

CASH FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 415 Kansas Avenue, Topeka, Kans.

REAL ESTATE.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 158 Wabash Avenue, Chicago.

FOR SALE Farms—Bargains; 500 farms, stock ranches, Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Ks.

FOR SALE 640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

NORTON COUNTY LAND We handle Norton County Lands, where alfalfa, corn and wheat is raised successfully. Norton County lies in the middle west, where we do not have droughts or hot winds. Write me for full particulars J. W. Bressler, Clayton, Kansas.

640 acres, half in cultivation, 150 acres in wheat, half to buyer, 150 acre spring crop, one-fourth to buyer, well, mill-tauk, grove; \$11 per acre; all smooth, best of soil, 5 miles to market.

Oakley Land and Investment Co.,
Oakley, Kansas

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. Niquette Bros., Salina, Kansas.

IF YOU WANT A HOME
Write HAYES, "The Land Man,"
Drawer K, - - Almena, Kans

HOBBS & DETWILER
Real Estate Dealer Smith Center, Kans.

We handle Smith County Lands, located in the best corn county in Kansas. Write us for full particulars and complete land list.

Nemaha County Farms
Nemaha County, Kansas cannot be excelled in the production of Corn, Oats, Millet and Speitz. Here Alfalfa, Clover and Blue Grass have no equal. Write for prices and description.

KNIGHT & SPICKELMIER, Centralia, Kans.

Phillips County and Western Kansas
280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; my price \$25. 160 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 acre. W. B. Gaumer Realty Co., Phillipsburg, Kans.

**Why Do So Many Men
.....Toil For Others.....**
Helping enlarge their bank accounts, when each and every man, can become a land owner by corresponding with H. P. Fitzgerald, who will sell you land for \$5 an acre, which will produce 30 bushels of wheat and 40 bushels of corn per acre. One crop pays for the land. Don't wait. Write today to H. P. Fitzgerald, Jamestown, Kans.

**Norton County
Alfalfa and Corn Farms**
We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, - - Kansas

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. THE DOWNS REALTY CO., Downs, Kansas.

**Hurley & Jennings'
Land Bargains**

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

**Holton Real Estate
and Loan Co.**

Holton, Kansas, Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

Watch Tacoma Grow!

Population, 1900, 37,714
Population, 1906, 85,000

Leading industrial center of Pacific Northwest.

Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamps for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

REAL ESTATE.

REAL ESTATE.

WHEAT FARMS ON EASY TERMS

IN Sherman County, Kansas

At from \$5 to \$15 per acre. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices. :: :: :: :: :: :: :: ::

Albert E. King, McPherson, Kansas

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands), Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow. Mention Kansas Farmer when you write.

WE GIVE YOU TEN YEARS TIME

In which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices.

Write for full information. FREE.

THE UNION PACIFIC LAND CO.,
Department F, Omaha, Nebraska.



A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg., Topeka, Kans.

MCKENZIE LAND AND IMMIGRATION AGENCY

Wants an agent to represent them in every county in Eastern Kansas and Eastern Nebraska to solicit buyers for Thomas and Rawlins County Lands. We own and control large tracts of the choicest land and prefer to deal through agents. It is not necessary for a man to be engaged in Real Estate Business to act as an agent. A successful farmer makes the best agent. Write us for full particulars and advertising matter. McKinzie Land and Immigration Agency, Colby, Kans.

Sheridan County Land

A choice section six miles from Hoxie, \$12.50 per acre, 320 acres, \$2,500. A well improved 800 acre tract, three miles from town, perfect land, \$15 per acre. Thousands of acres of northwestern Kansas land for sale at \$8 to \$15 per acre. Write for statistics showing the products of the County in the past years and our price list.

Sheridan County Land Co.
Hoxie, Kansas

NEW BOOK JUST ISSUED

SUCCESSFUL FRUIT CULTURE

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD,
Formerly Professor of Horticulture at the Massachusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, strawberry, blueberry, huckleberry, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most successful methods of the present day, and is the most recent practical treatise on this important industry.

Illustrated, 5x7 inches, 265 pages. Cloth.

Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA, - - - - - KANSAS

REAL ESTATE.

REAL ESTATE.

100,000 ACRES

READY TO SELL

At From

\$18 to \$25 an Acre

In the

Greatest Irrigated District

ON THE AMERICAN CONTINENT

Located in the ideal country for diversified

farming

Southern Alberta, Canada

The land famous for its tremendous crops of Hard Winter Wheat, Alfalfa and Sugar Beets

These 100,000 acres are a part of the enormous undertaking of the

Canadian Pacific Ry.,

Which will eventually bring "under ditch"

over a million and a half acres of land.

Now is the Time

To pick your location; remember, also,

that you are not dependant upon weather

conditions to insure you a crop.

This is a Land

of which it can be safely said

No Floods, No Droughts,

Every Year a Harvest Year

These lands are all located in a single

block north of the main line of the

CANADIAN PACIFIC RY.

at Gleichen.

Note.

The Canadian Pacific Ry. will

forever maintain the canals

and laterals at a nominal cost

of 50 cents per acre per annum.

For further particulars, terms of sale,

and certificate of low railroad rates, write

Shade Trees for the Home.

(Continued from Page 355.)

place, particularly for city and town planting. With the use of fertilizers it can be crowded to an annual growth of three to five feet in height and an annual increase in diameter of at least an inch.

The American Linden with little care grows in good form, giving trees of large size, symmetrical head and great beauty. The sycamore may also be planted.

The Carolina poplar is oftentimes planted on real-estate additions where very speedy results are desired. This tree can be pushed to the growth of four to eight feet in a season and will make a large-sized tree in less time than any other.

If judiciously trained, the soft maple will give satisfactory results. Those who are willing to wait longer and give more time may plant the Norway and sugar maples.

The Catalpa speciosa grows with rapidity and transplants with great ease and certainty. Its mass of bloom is particularly attractive in June. By reason of its fleshy roots it can be transplanted when of large size. It has no insect enemies and can be planted with confidence.

Some varieties of trees may be used to advantage in grouping. The white birch contrasts in a pleasing way with trees of darker bark. The brilliant bloom of the redbud, appearing before the leaves, makes a tree very desirable for early spring.

The oak-leaf mountain ash never attains very large size. It may be used as a specimen tree, standing alone, or as one of a group. An occasional tree of the honey-locust may be used. The writer remembers a very symmetrical tree of this variety planted on the grounds of the late J. Sterling Morton, at Nebraska City. Its fine foliage makes this tree attractive. The cut-leaf, weeping birch is occasionally planted in sheltered grounds, and where conditions are favorable this choice tree gives satisfaction.

The hackberry is indigenous to Central and Western Nebraska. The foliage endures the coal smoke of town. The tree carries rather more foliage than the elm and is well suited to Western Nebraska.

PLANTING.

In our climate it is better to plant in early spring. The very best time to transplant any tree is just as the sap is moving and the buds swelling. At this time new rootlets are quickly formed, assuring continued supply of sap.

In preparation for planting it is well to stake out the grounds for planting, so that each tree when planted may fit in as a part of the whole. It is well to dig the holes a foot deeper than would naturally be required by the size and amount of roots. In width, the hole should be a foot wider each way than the roots of the tree extend. In refilling the hole, secure well-aerated surface soil and the more fertile the better. The tree should be planted four to six inches deeper than it grew in the nursery row. After the tree is solidly planted and earth has been filled in and tramped four inches above the roots, add two or three pails of water, or enough to saturate the soil. Then fill in two or three inches of very fine, old manure, that which has rotted for years is best suited to this work. The first office of this application is to increase the fertility of the soil. The second is, it acts as a mulch, lessening the evaporation of moisture. Over this fill to surface level and either leave and keep the surface loose by frequent cultivation, or mulch to the width of six to eight feet about the tree. Since the tree in transplanting suffers considerable loss of root, it is quite important that this should be partially balanced by judicious cutting back of top.

In order to shape a shade-tree so it will not break down during a storm, it should be remembered that a tree, with a straight, central trunk from which the side branches spread out horizontally, will not split down. A forked tree with two nearly equal branches may split off one. To correct the fork remove one branch, watching for other forks during the growth of the tree. In trimming shade-trees of considerable size, do not cut back to bare poles with short stubs of limbs. Leave a considerable number of small branches, twigs, and buds that shall expand and help to use the natural circulation of the sap.

TRUNK PROTECTION.

Since trees of all kinds while growing in nursery row, or for that matter in timber, have the trunks closely shaded, the bark is sensitive to the ex-

treme power of sun and wind. It is therefore important to completely wrap the trunks of trees at planting time to lessen the evaporation. In case of very large trees this is usually done with rope twisted from hay or straw. With smaller trees wrapping burlap will be sufficient. This suggestion is of very great importance. It lessens the effect of the sun and wind and is likely to guard against the attack of injurious insects.

EVERGREENS.

Evergreens may be used as shelter-belts or in groups and occasionally in single specimens. They transplant to best advantage if moved just as the buds are swelling. This varies with different varieties. The pine family may be transplanted in the first half of April.

The red cedar will do better if not moved until late April or early May, and should the season be cold and backward perhaps even later, watching for the time when the buds are swelling and new rootlets would be most quickly pushed forward to support the transplanted tree.

In the transplanting of evergreens it is found advantageous to water the ground where they stand quite freely before removal. Allow the trees to drink and fill themselves for a day or two before transplanting. In this way they store up moisture enough to materially assist them in overcoming the shock of removal. Since the evergreen tree is always in leaf, more care is required in transplanting than in handling a deciduous tree which is usually transplanted when not in leaf.

It is of the utmost importance to protect the roots of evergreens from exposure to sun or wind. Since the evergreen sap is resinous in character, it very rapidly sets or hardens and does not liquify or start afterwards. A few minutes exposure of the roots of evergreens to sun or drying wind is usually equivalent to the loss of the tree, although the tree may look well for some days or weeks thereafter.

Fruit Prospects.

Reports on fruit conditions from about forty counties received by Secretary W. H. Barnes of the State Horticultural society, indicate that the prospects at the present time are equally as good as they have been at this season at any time in recent years.

With the exception of peaches, fruit is in good shape. Peaches in many counties have been damaged by cold weather and in some counties are dead.

The report by counties reads:

Bourbon—Small fruits not hurt.

Sedgwick—Hurt a little; not bad.

Barber—No harm to speak of.

Jefferson—Condition still good.

Jackson—Half of tender peaches dead; prospects still good.

Douglas—Tree fruit still safe.

Sumner—Fruit still safe.

Geary—Fruit still safe.

Wyandotte—No damage; best prospect for years.

Marion—Some apricots and plums hurt; other fruit all right.

Shawnee—Plums, some killed; peaches, Elberta and Crawford, 90 per cent killed; Amsden, Crosby, Early Rivers and hardy seedlings all right; grapes good; pears, Keifler hurt, Seckel all right; apples all right.

Franklin—Nothing hurt but a few peaches.

Wabaunsee—Everything in good shape except apricots.

Montgomery—Prospects never better.

Kearny—Everything safe except a few apricots and peaches.

Butler—Prospect good.

Leavenworth—Fruit prospects fine.

Osborne—Crop is uncertain.

Nemaha—Prospects good; no damage.

Riley—Peaches, Elberta mostly dead;

Family Favorites and seedlings, half of buds alive; grapes and small fruits show a prospect for a full crop.

Allen—No dead peach-buds; other fruits in heat of condition.

Brown—Prospects for good crop general.

Johnson—No fruit killed and prospects good.

Russell—Peaches damaged some, but enough live buds left to insure a good crop. All other fruit in good shape except apricots.

A queer method of fishing is used by the Chinese. The fisherman lets down from the side of the boat a screen of white canvas. The shoni of fish mistake this for some floating obstruction and try to leap over it, with the result that the fish jump in the boat and are thus captured. This method is employed by Malays in their waters.

MIDDLE LIFE

A Time When Women Are Susceptible to Many Dread Diseases—Intelligent Women Prepare for it. Two Relate their Experiences.

The "change of life" is the most critical period of a woman's existence, and the anxiety felt by women as it draws near is not without reason.

Every woman who neglects the care of her health at this time invites disease and pain.

When her system is in a deranged condition, or she is predisposed to apoplexy, or congestion of any organ, the tendency is at this period likely to become active—and with a host of nervous irritations make life a burden. At this time, also, cancers and tumors are more liable to form and begin their destructive work.

Such warning symptoms as sense of suffocation, hot flashes, headaches, backaches, dread of impending evil, timidity, sounds in the ears, palpitation of the heart, sparks before the eyes, irregularities, constipation, variable appetite, weakness, inquietude, and dizziness, are promptly heeded by intelligent women who are approaching the period in life when woman's great change may be expected.

Lydia E. Pinkham's Vegetable Compound was prepared to meet the needs of woman's system at this trying period of her life. It invigorates and strengthens the female organism and strengthens the weakened nervous system.

For special advice regarding this important period women are invited to write to Mrs. Pinkham at Lynn, Mass., and it will be furnished absolutely free of charge. The present Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham, her assistant before her decease, and for twenty-five years since her advice has been freely given to sick women.

Read what Lydia E. Pinkham's Compound did for Mrs. Hyland and Mrs. Hinkle:

Dear Mrs. Pinkham:

"I had been suffering with displacement of the organs for years and was passing through the change of life. My abdomen was badly swollen; my stomach was sore; I had dizzy spells, sick headaches, and was very nervous.

Lydla E. Pinkham's Vegetable Compound Succeeds Where Others Fail.



"I wrote you for advice and commenced treatment with Lydia E. Pinkham's Vegetable Compound as you directed, and I am happy to say that all those distressing symptoms left me and I have passed safely through the change of life, a well woman. I am recommending your medicine to all my friends."—Mrs. Annie E. G. Hyland, Chester-town, Md.

Another Woman's Case

"During change of life words cannot express what I suffered. My physician said I had a cancerous condition of the female organs. One day I read some of the testimonials of women who had been cured by Lydia E. Pinkham's Vegetable Compound, and I decided to try it and to write to you for advice. Your medicine made me a well woman, and all my bad symptoms soon disappeared."

"I advise every woman at this period of life to take your medicine and write you for advice."—Mrs. Lizzie Hinkle, Salem, Ind.

What Lydia E. Pinkham's Vegetable Compound did for Mrs. Hyland and Mrs. Hinkle it will do for other women at this time of life.

It has conquered pain, restored health, and prolonged life in cases that utterly baffled physicians.

Barn Plans and Outbuildings

New, revised and greatly enlarged edition,
Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARNES
CATTLE BARNES AND STABLES
DAIRY BARNES
CATTLE SHEDDERS
SHEEP BARNES AND SHEIRS
PIGGRIES
POULTRY HOUSES
CARRIAGE HOUSES AND HORSE BARNES
CORN HOUSES AND CRIBS
ICK HOUSES

ICE HOUSES AND COOL CHAMBERS
DAIRY HOUSES
CREAMERIES AND CHEESE FACTORIES
SPRING HOUSES
GRANARIES
SMOKE HOUSES
BOO KENSELS
BILDS
ROOT CELLARS AND ROOT HOUSES
BUILDINGS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5 x 7 inches, 401 pages.

Cloth, price, postpaid, \$1.00

**THE KANSAS FARMER CO.
TOPEKA, KANSAS**

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-boded kind. A fine lot of bred gilts for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Crimson Wonder 38755 Herd
Will have something fine to offer. Can furnish trios not akin sired by Crimson Wonder 38755 and Kerr's Champion 2355.
Mr. & Mrs. Henry Shrader, Wauketon, Kas.

Orchard Hill Herd of Duroc-Jerseys.
Some fine summer and fall males for sale.
Summer gilts are being bred.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

HIGHLAND HERD of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13265, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall gilts sired by Cole's Duroc 15131, Hunt's Model 20177, Chaplin's Duroc and Joe Folk by Belle Chief 2d. 20 bulls for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

Egypt Valley Duros
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

POLAND-CHINAS.

A. AND P. SCHMITZ, ALMA, KANSAS.
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description.

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion, 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS

Route 5, Leavenworth, Kans.
Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27966, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

E. E. Axline's Public Sale of Poland-Chinas

AT
Independence, Mo., April 5, 1906

THIRTY HEAD—10 bred gilts, 10 open gilts, 10 choice young boars. Send for catalogue.

E. E. AXLINE, - Oak Grove, Missouri

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; other breeds. Best strains represented.
H. N. HOLDEMAN, R. R. No. Girard, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas.

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard,
Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREAED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32804, Perfection Now 32530, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kan.

200 Head Poland-Chinas

Klever's Perfection 32855, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, 1-2 Mile Sedgwick, Kansas.

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

CHESTER WHITES.**O. I. C. SWINE**

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair**CHESTER-WHITE HOGS**

Shorthorn cattle, Oxford sheep and Peafowls. I won 18 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peoullar, Mo.

O. I. C. Hogs**Scotch Collie Dogs****B. P. Rocks**

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Una, Silver Mina and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

FIFTH TERM JONES' NATIONAL SCHOOL of Auctioneering and Oratory

Davenport, Iowa
6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President

When writing advertisers please mention this paper.

BERKSHIRES.**EAST RENO BERKSHIRES.**

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willems, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72686. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,
Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES Imported Blood

30 extra choice boars, 100 to 150 pounds. 40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 4771; Lady Lee 99th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.**Aberdeen-Angus Cattle**

25 Aberdeen-Angus bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED**Angus Cattle**

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

PARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kas.

RED POLLs.

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON,
ROUTE 1, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see
CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle

Young Stock for sale.

WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of

Percheron Horses, and Plymouth Rock Chickens

Address, S. C. BARTLETT,

Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM**Polled Durhams**

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

GALLOWAYS.

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, FURLEY, KANS.

Breeder of Galloway Cattle

HEREFORDS.**Registered Herefords**

Individual merit and choicest breeding. Dale Dupl. 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

Vermillion Hereford Co., VERMILION.

Boatman 56011 and Lord Albert 131557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Plutier 66634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

SHORTHORNS.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by L. A. MEAD, Kingdown, Ford County, Kansas. For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM

JOHN REGIER, Prop., Whitewater, Kans. Breeder of thick-fleshed, early-maturing Shorthorn cattle.

NONPAREIL STAR 18848 at head of herd.

J. L. MILLER & SON, Muscotah, Kansas. Breeders of Shorthorn Cattle.

Six coming yearling bulls for sale at reasonable prices. These animals are fine individuals and sired by The Champion of Delaney Valley 154959, a son of Gentleman 126072, by Red Knight bred by W. A. Harris.

SHORTHORNS.

Registered Shorthorn Cattle
Duroc-Jersey Swine
Also choice B. P. Rocks. All Stock fashionable bred, and choice individuals. For Sale—One July 27, '05 built; price, \$100. Eggs, Bradley mailing, \$2 per 15; range eggs, \$1.50 per 15; \$5 per 100.
Newton Brown, Whiting, Kansas

Pearl Shorthorn Herd

Forty Young Bulls For Sale—Ranging from 6 to 24 months old and sired by the noted Scotch bulls, Barou Ury 2d 124970, Sunflower's Boy 127337, and Bold Knight 179054. Address

C. W. Taylor

(Wire or Phone), Pearl, Dickinson Co. Kans. (Mail Route No. 2), Enterprise, Kansas.

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds

of Shorthorns and Berkshires
Baron Rupert 248287 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. - Yates Center, Kans.

Alysdale Shorthorns

Prince Consort 187008, by Imp. Prince of Perth and out of Goldfinch, full sister to the champion Lavender Viscount in service. Cruckshank and Cruckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

HOLSTEINS.

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young Bulls and a few young cows and
heifers for sale.

HORSES AND MULES.

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

**REGISTERED BLACK MAMMOTH
and CATALONIAN JACKS, SADDLE and TROTTING HORSES**

The best in the state and at a low price. Come, or write for prices on what you want.

G. A. FEWEL,
LEETON, JOHNSON CO., MO

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sex. Also Shorthorn Cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. Thisler, Chapman, Kas.

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700 pounds
4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40180, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

**Percheron Stallions
FOR SALE**

Two blacks, 1 steel gray.
Colonel Carter 27952 by Titus 17122 (36778), he by Cyrus (1997), he by Sultan (4713), he by Bayard (9495), he by a son Jean Le Blanc (739).
Dam Camille 14963, by Brilliant 1271 (755), he by Brilliant 1899 (756), he by Coco II (714), he by Vieux-Chaslin (713), he by Coco (712), he by Mignon (715), he by Jean Le Blanc (739); 2d dam by Ceres 9053 (9096); 3d dam, Madelon (8898) by Tavora 686 (725). All about the same being sired by Titus 17122 (36778) and dams got by Brilliant 1271 (755).

Wyatt Stanley
ANTHONY, KANSAS

Collections made in all parts of the United States
No fee charged unless collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency
415 Kansas Avenue.
TOPEKA. KANSAS

Special attention given to stock-breeders accounts.
Reference furnished on application.

When writing advertisers please
mention this paper.

LIVE-STOCK AUCTIONEERS.**LIVE-STOCK AUCTIONEERS.****JOHN D. SNYDER,**

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. If have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

Bunceton, Mo.

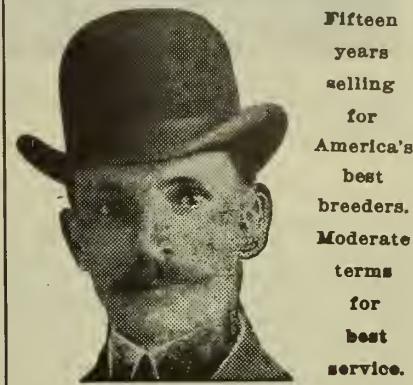


First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer

MARSHALL, MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty.
All Herd Books. Catalogues compiled. Sale tent free.

Z. S. BRANSON

Live Stock Auctioneer

Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values.
Terms reasonable. Inquiries cheerfully answered.

John Daum

Nortonville, Kansas

Live Stock Auctioneer

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

Kansas City to Seattle**Two Daily Trains over Shortest, Quickest and Most Interesting Route**

Northwest passengers now have choice of two thru trains, one leaving Kansas City Union Depot at 9.50 a. m. and the other at 6.05 p. m.

Both have thru' standard sleeping cars, thru' tourist sleeping cars, thru' chair cars, and dining car service all the way.

Tell me where you want to go and I'll tell you how best to get there and the cost.

Burlington
Route

H. A. ABBOTT, Southwestern Passenger Agent,
823 Main St., Kansas City, Mo.

1906

EXTREMELY LOW RATES

To California, Oregon, Washington, and Points East

Homestead rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, G. P. & T. A., TOPEKA, KANSAS.

The Southwest Limited

Was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts. If you doubt the first fact compare the service of today with that before the Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago via the

Chicago, Milwaukee & St. Paul Railway

will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p.m.: Grand Avenue 6.07 p.m. Arrives Union Station, Chicago, 8.20 a.m.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street
KANSAS CITY

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humble gaged" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. "Back up," Bill, see Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

SO—STALLIONS—SO

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent tan stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "10 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS'—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM

A choice lot of Imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS,

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards.
Sedalia, Mo.
Portland, Oregon.
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London, Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

... by ...

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA UNIVERSITY.

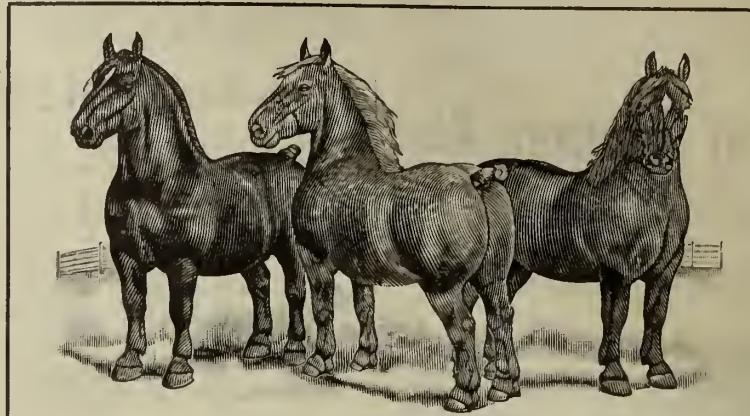
How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$1.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists Physical Culture, Animals, Building Plans and Ideas Beautifying Homes, Splendid Stories, Brilliant Humor Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	PEARSON'S MAGAZINE	NATIONAL MAGAZINE	AMERICAN BOY OR.....	PHYSICAL CULTURE MAGAZINE.....
----------------------------	--------------------------	-------------------------	----------------------	--------------------------------

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

THE EVENT OF THE SEASON AT KANSAS CITY

The Great Three-Days' Auction of

Aberdeen-Angus and Herefords

FROM THE HERDS OF LEADING BREEDERS AND EXHIBITORS

AT FINE STOCK SALE PAVILION, STOCK YARDS, KANSAS CITY, MO., TUESDAY, WEDNESDAY AND THURSDAY,

April 3, 4 and 5, 1906

Sixty Attractive Aberdeen-Angus will be sold on Tuesday, April 3d

CONSIGNMENT BY

Jos. H. Rea & Son, Carrollton, Mo. C. J. Williams, Harris, Mo.
R. S. Williams, Liberty, Mo. S. P. Dewey, Ft. Madison, Iowa.
T. J. McCreary, Highland, Kans. S. Melvin, Greenfield, Ill.
Berry Lucas, Hamilton, Mo. Geo. H. Malze, Happy Valley, Mo.

Fifty-eight High-Class Herefords will be Auctioned Wednesday, April 4th

CONSIGNMENT BY

Gudgell & Simpson, Independence, Mo. J. A. Wilkerson, Kearney, Mo.
Scott & March, Belton, Mo. J. C. Andras, Jr., Manchester, Ill.
Dr. James E. Logan, Kansas City, Mo. B. H. Downing, Clark, Mo.
R. T. Thornton, Kansas City, Mo. T. W. Carmichael, Odessa, Mo.
James A. Gibson, Odessa, Mo. J. S. Lancaster & Sons, Liberty, Mo.
T. P. Whittenberg, Pleasant Hill, Mo. James Paul, Patch Grove, Wis.

FIFTY HEREFORDS BEAUTIFULLY CONDITIONED AND OF GRAND SUBSTANCE, CONFORMATION AND BREEDING WILL BE SOLD ON THURSDAY, APRIL 5, BY DR. JAMES E. LOGAN, KANSAS CITY, MO.

They have been carefully selected from his noted SUNSET Herd and constitute a very choice offering

The Best Type, Character and Blood Lines are represented in these offerings by both sexes of these two breeds. For catalog address,

W. C. McGAVOCK, SALE MANAGER, - - SPRINGFIELD, ILLINOIS

COLS. R. E. EDMONSON, GEO. P. BELLOWES and R. L. HARRIMAN, Auctioneers

Mr. C. R. Thomas, Secretary of the American Hereford Breeders' Association, will also assist in the ring the day the Herefords are sold.

SHORTHORN EVENT EXTRAORDINARY *At Fredonia, Kansas, April 13, 1906*

...ALL GOOD ONES...

The Southeastern Kansas Improved Stock Breeders' Association have decided to make their annual Spring sale at Fredonia, Kansas, the most important event not only of their circuit but of Kansas for this year. We know that we must offer good cattle to have a good sale, and we are offering our best cattle—all good ones.

We know it will not do to try to make a few good ones sell a lot of culs, so we are offering absolutely all good ones. Tabulated pedigrees will show animals by the following great Scotch and Cruickshank bulls: Imported Collynie, imported Mariner, imported Choice Goods, imported Lord Cowslip, imported Tillycarn, Battle Axe, and Golden Victor, Jr., of Harris breeding; Scottish Emperor, of Bellows breeding; Kinellar, Captain Archer, and Aberdeen, of Hanna breeding. :: :: ::

...ABSOLUTELY NO CULS...

S. C. HANNA

Howard, Kans.

H. M. HILL

Lafontaine, Kans.

E. S. MEYERS

Chanute, Kans.

O. E. MORSE & SON and others

Mound City, Kans.

Apply for Catalogues to **H. E. BACHELDER, Secretary, Fredonia, Kansas.**

Auctioneers. COLS: BELLOWES, HARRIMAN and SHEETS.

Public Sale of Shorthorns

AT THE HEATH RANCH TWO MILES SOUTH OF REPUBLICAN CITY, NEB.

Wednesday, April 4, 1906

THIS, the seventh annual offering, will consist of 30 head, cows, heifers and bulls from 10 months to 4 years old, and 3 Polled Durham, double-standard, bulls. All are in good, healthy breeding condition, just the kind to use on the farm for good dairy or family use. It will be one of the grand opportunities of the season to get something good at your own price, for the sale is positive and everything will be sold without reservation.

There will also be sold a dozen or more GRADE PERCHERON HORSES, a number of good farm horses, 10 bred Poland-Chinas, farm implements, and other things too numerous to mention.

TERMS: Cash, or good bankable note.

Send for catalogue and come to the sale.

COLS. JOHN BRENNAN, GASKILL and HOGATE, Auctioneers.

F. A. HEATH, Republican City, Neb.

Janes Stock Farm of Williard, Kansas



Will Hold a Public Sale of
34 Trotting-Bred Horses

at the State Fair Grounds, Topeka, Kansas

Tuesday, April 3, 1906

The offering includes the herd stallion General Evans 13166 with a record of 2:22 1/2 and one of his best sons. The offering comprises standard-bred mares and fillies mostly sired by General Evans.

The stock may be seen at the barns, Willard, Kans., 15 miles west of Topeka, until two weeks prior to date of sale when they will be shown at the Fair Grounds, Topeka, where the sale will be held.

For the catalogue and other information address

H. S. JANES, Herington, Kansas

Auctioneers—COLS. J. W. SPARKS and C. M. CREWS.

The Kansas Farmer...

The Greatest and Best Advertising Medium for Reaching the Farmers of the Middle West, of TOPEKA, KANSAS

The Johnson County Breeders' Association

Will Sell At

Olathe, Kansas, Friday, April 6, 1906

32 Shorthorns and 8 Herefords

Good, Well-bred, Useful Cattle

CONSIGNMENT BY

GEO. B. LITTLE.....	Olathe, Kansas
J. S. FERGUS.....	Olathe, Kansas
A. M. COOPER.....	Olathe, Kansas
J. L. WILLIAMS.....	Olathe, Kansas
H. E. HAYES.....	Olathe, Kansas
GEO. KELLEHER.....	Olathe, Kansas
J. L. HOOVER.....	Gardner, Kansas
A. B. KELSEY.....	Gardner, Kansas
J. P. HASTINGS.....	Edgerton, Kansas
J. B. DICKSON.....	Edgerton, Kansas
A. J. JAMES.....	Lenexa, Kansas

FOR CATALOG ADDRESS,

H. E. Hayes, Secretary Olathe, Kansas

Cols. J. W. Sparks and A. J. James, Auctioneers.



PUBLIC SALE OF POLAND-CHINA HOGS.

ON APRIL 4, 1906, I will sell at public sale at my farm, five miles southeast of Topeka, 13 head of bred sows and gilts and 7 males, 2 heard boars—Klondike Jr. 63129 and Proud Rye's Sunshine 63003, Ohio Record. Also 3 head of milch cows and 3 heifers which will give milk about the middle of the summer. One span of black horse mules coming 2 years old, well matched and dandies. One check-row, 2-horse-power corn-planter; one seed drill, 2-horse-power, one 3-horsepower gasoline engine and circular saw; one grist mill; one 4-horse down-power, with 25 feet tumbling shaft and knuckles. I am going out of the stock business and give my attention to fruit and grass. Terms are cash or bankable note. Should any one want credit, make it known before sale. Remember the date, Wednesday, April 4, 1906.

COL. C. M. CREWS, Auctioneer.

V. B. HOWEY, Proprietor, Topeka, Kans.

LUNCH AT NOON.

FOR SALE

12 Kentucky Jacks 12

I have for sale at Snyder's Livery Barn at Salina, Kansas, twelve Kentucky jacks just shipped from Flemingsburg, Kentucky. We invite prospective purchasers to call and look at these animals. They are all large, heavy-boned individuals, and are excellent breeders.

Saunders & Maggard

A. M. ASHCRAFT'S Public Sale of Shorthorns

AT ATCHISON, KANSAS, APRIL 10, 1906

42 HEAD

27 choice cows and heifers, 15 bulls, short yearlings and 2-year-olds—nearly all by the short-legged Scotch bull Harmony's Knight 28509, and are of the same type as their sire. The cows and heifers are all dark red, very uniform; all have been reared on the farm and are all in calf to the good Scotch bull Scottish Minstrel 234970 by Imp. Scotch Mist.

Free conveyance from Carter's Livery Barn to farm
where sale will be held

Auctioneers: COLS. GEO. P. BELLows, HARRY GRAHAM, JOHN DAUM

Send at once
for Catalogue

A. M. Ashcraft, Atchison, Kan.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

THINK OF IT

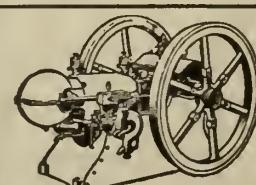
A whole section, 640 acres, in the wheat country, only four miles northeast of Wa keeney, on the Union Pacific, in Trego Co. Kans., for \$10 per acre. Liberal terms. This is Sec. 25, T. 11, R. 23. Address, at once, FRANK J. BROWN, Exclusive Agent, Topeka Kansas.

ANYONE WISHING
UNITARIAN SERMONS and
PUBLICATIONS SENT FREE, may address Mrs. F. O. Leland,
Concord, Mass.

White Plymouth Rocks
Scoring 95 .. Scored by Rhodes
Eggs from selected pen, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Ida Meier, Route 2, Lincoln, Kansas.

DETECTIVES

Shrewd men wanted in every community, to act under instructions; previous experience not necessary. Send for free book of particulars. Grannan's Detective Bureau 110 Cincinnati, Ohio.



LIGHTNING GASOLINE ENGINE

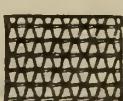
STATIONARY AND PORTABLE, 3 TO 25 H.P.

NEW PLAN FOR COOLING CYLINDER

Reduces Water Tank to a Few Gallons

Send for Catalog.—Special Farm Engines

KANSAS CITY HAY PRESS CO., Mill St., Kansas City, Mo.



Thirty-One Styles of Farm Fencing

Sold direct to consumers on thirty days trial
at wholesale prices. Catalogue free.

THE FARMERS' FENCE CO.
McLeans, Kansas.

630.5
KAF

KANSAS FARMER

The map of Kansas shows its 105 counties and their names. It is bordered by Colorado to the west, Nebraska to the north, Missouri to the east, and Oklahoma to the south. The state is also labeled with "IND. TER." (Indian Territory) to its southeast.

Volume XLIV. Number 14

TOPEKA, KANSAS, APRIL 5, 1906

Established 1863. \$1 a Year

The Y. M. C. A. Building Kansas State Agricultural College

My Farmer Friends:—Perhaps few of you are acquainted with the efforts which we have been making at the Kansas Agricultural College for the past two years with reference to raising a certain sum for the construction of a Y. M. C. A. Building for the Agricultural College students. You know something of the work of the Young Men's Christian Association in the cities and in the colleges of the land. It is a splendid organization and is accomplishing a grand work in developing Christian citizenship and in raising the standard of manhood in our colleges and cities. It is a necessary organization in every university or college.

We have a strong Y. M. C. A. organization at the Agricultural College, but the students have been hampered by not having proper accommodations in the way of buildings and equipments for carrying on the work of the organization. Nearly two years ago our worthy secretary of the College Y. M. C. A., W. W. McLean, originated the plan of raising a certain sum for the construction of a suitable building to be the home and headquarters of the Y. M. C. A. of this college. The original plan was to raise \$25,000, and of this amount \$22,000 has already been subscribed, as follows: Students and faculty of the college, \$13,000; alumni, \$4,000; business men of Manhattan, \$4,000; an Eastern friend, \$1,000. It has been found that \$25,000 is not enough even to complete the building which has been planned, besides it will require some five or six thousand dollars to equip the building after it is completed. It is proposed therefore to raise \$10,000 more. It is necessary to have this amount subscribed in order to let the contract and begin the construction of the building. The lot has already been purchased and the plans of the building have been drawn and everything is ready to construct the building as soon as the money is raised.

We believe that the balance of the sum required, \$10,000, ought to be contributed by the people of the State, a large part of which should come from the farmers of Kansas. You have observed the recent success which has attended the movement in Kansas City to raise \$250,000 for the construction of a Y. M. C. A. building in that city. We should certainly be able to raise \$10,000 from among the farmers of Kansas, since the purpose is to make a place at the Agricultural College which may be a religious home for the farmers' sons who attend this institution.

The Agricultural College is supported entirely by the State and the United States; no individual donates anything for its support. The State, however, contributes nothing toward carrying on religious work or towards the construction of buildings for that purpose. Here is an opportunity for the farmers of Kansas to show their appreciation of the splendid work which the Agricultural College and Experiment Station is doing.

Several of the Kansas farm papers, the KANSAS FARMER, Mail and Breeze, and Farmers' Advocate, have agreed to assist in the canvass in raising this \$10,000, which is still required. These papers have generously started the subscription at a good figure and we hope

that the plan will meet with the approval and a hearty response from the farmers of the State.

Let's see, it will take 10,000 one dollar subscriptions to raise the amount required and I am sure that there are ten thousand farmers who will read this article who are interested a dollar's worth in the Y. M. C. A. work and in the Agricultural College and its development, which interest they can show by contributing toward this Y. M. C. A. building fund. But we expect a great many larger subscriptions. One thousand \$10 subscriptions will

UNDESIRABLE CAMPERS.

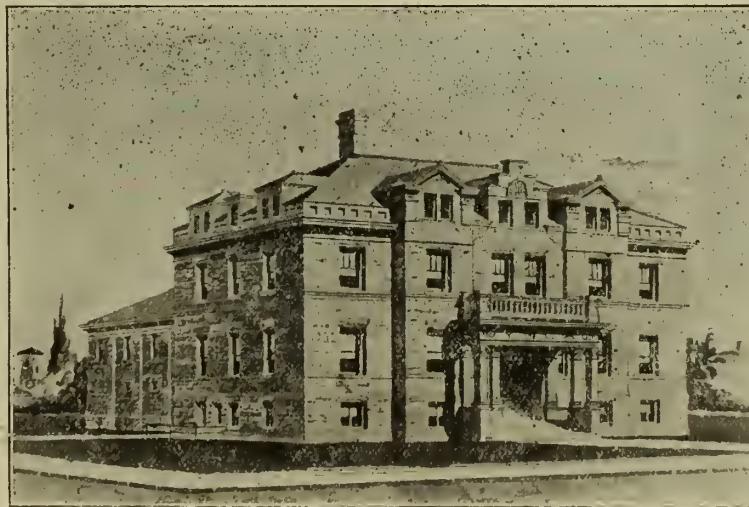
EDITOR KANSAS FARMER:—How long can travelers camp by the public roadside? If there is a time limit, to whom should a complaint be made to induce them to move?

Has the owner of adjoining land any more authority to induce them to move than any one else?

They camp for several days and even weeks at a time. Some of them work while others offer little worthless things for trade for a living, which, with the pitiful stories they tell, amounts to almost the same as begging.

A SUBSCRIBER.

Any one has a right to the unlimited use of the road for purposes of travel. This necessarily includes the right to make such stops as may be incidental to the use of the road in passing to and fro. For all other purposes than its use as a highway, the land included in the road belongs to abutting farms,



Proposed Y. M. C. A. Building, Kansas State Agricultural College.

raise the amount, and it would only take one hundred \$100 subscriptions. I have been informed by farmers in different parts of the State that the suggestions, information, and bulletins received from the Agricultural College and Experiment Station have actually saved for them in one instance more than \$100. I received a personal letter from a farmer in Southern Kansas a few days ago in which he volunteered his financial assistance in any way which would be beneficial to the Agricultural College. I know there are others who will be willing to contribute in this way.

The writer is chairman of the College Y. M. C. A. board of control, and is personally interested in seeing this building proposition succeed. Such a movement ought to receive the hearty support of the farmers of Kansas, and the friends who assist in this movement will receive the appreciation of the agricultural board, faculty, and students, as well as the commendation of all friends of the Agricultural College and the Y. M. C. A. throughout the State.

You may send your subscription to the publisher of this paper, or to W. W. McLean, secretary of the College Y. M. C. A., Manhattan, Kansas. The names of those who contribute to this movement will be published in this paper. Now, do not delay, let us see how quickly we can raise this small amount. It seems that we have raised as much by local subscription as it is possible to raise. Some have proposed trying to raise this amount from wealthy men of Eastern United States, such as Carnegie

(Continued on page 384.)

and if the use of the road as a highway be abandoned, the vacation of the road turns the land back to the adjacent farms and vests in the owners the exclusive right to use the land.

It is reasonable to concede to travelers upon the road the right to camp by the wayside for rest and recuperation on their journeys. It is unreasonable for any to assume that this right extends to the establishment of a domicile upon land loaned to the public for purposes of passage.

In "Kent's Commentaries," Vol. III, pp. 548, 549, occurs the following clear statement of the common law in the case:

"The presumption is that the owners of the land on each side go to the center of the road, and that they have the exclusive right to the soil subject to the right of passage to the public. Being owners of the soil, they have a right to all ordinary remedies for the freehold. They may maintain action of ejectment for encroachments upon the road."

It is difficult to say just how long it is permissible to remain in camp as an incident of passage and, therefore, with right. Remaining beyond a reasonable time the occupant of the road may become an intruder, a trespasser, and subject to ejectment, as stated by Kent. It is to be borne in mind, however, that the court and jury are likely to deal leniently with the intruder in a case of this kind. It will be wiser for "Subscriber" to induce these undesirable neighbors to move on than to resort to the law. The legal remedy suggested by Kent is a civil suit in

ejectment to be brought by the owner of the land upon which the camp is maintained.

ORIGIN OF THE BEEF-TRUST CASES.

President Roosevelt is sending a special message to Congress discussing the several aspects of the meat-trust question.

It will be remembered that this beef-trust investigation followed a showing of injustice made by Guilford Dudley before the Kansas Stock-Breeders' Association in January, 1904. This association passed resolutions on the situation. H. A. Heath, of the KANSAS FARMER, secretary of the Stock-Breeders' Association, forwarded a copy of these resolutions to President Roosevelt accompanying them with a strong letter calling the President's attention to the gravity of the situation.

The resolutions forwarded and the replies which resulted were as follows:

RESOLUTIONS OF THE KANSAS STOCK-BREEDERS.

Whereas, Sufficient evidence has been presented to the stock-breeders of Kansas to convince them that there exists at Kansas City and other points an illegal and unlawful combination or trust that has the power to and does depress the price of beef on foot to the great damage and detriment of the breeders and feeders of Kansas and without a corresponding benefit to the meat-consumers of the world, but to the sole benefit of the packing trust; therefore be it

Resolved, By the Kansas Improved Stock-Breeders' Association, in its fourteenth annual convention assembled, that Theodore Roosevelt, President of the United States, be hereby requested to call the attention of his Attorney General to this matter and require him to investigate the same to the end that the guilty parties may be punished and the anti-trust laws of the United States be fully enforced.

Resolved, That a copy of this resolution be sent direct to the President of the United States, signed by the president and secretary of this, the greatest live-stock breeders' association in the United States.

Whereas, It is apparent that the laws of Kansas are ample for the suppression of trusts and combines and the control of all corporate interests; therefore, be it

Resolved, That we call upon Governor W. J. Bailey to secure the enforcement of these State laws by all means at his command and thus aid in fostering the industries which lie at the foundation of our prosperity and threatening these industries with gradual extinction; and further be it

Resolved, That a copy of this resolution be signed by the president and secretary of the Kansas Improved Stock-Breeders' Association and handed to Governor Bailey.

THE ROOSEVELT WAY.

White House, Washington, January 25, 1904.

My Dear Sir:—I beg to acknowledge the receipt of your letter of the 21st instant, with enclosed copy of resolutions, and to say that the President has taken the matter up with the Attorney-General.

Very truly yours,

W. M. LOEB,
Secretary to the President,
116 W. Sixth Street, Topeka, Kans.

REPLY OF THE ATTORNEY-GENERAL.

Department of Justice,
Washington, D. C.,

January 28, 1904.

Mr. H. A. Heath, Secretary Improved Stock-Breeders' Association, Topeka, Kans.

Sir:—The President has referred to this Department your letter of the 21st instant, enclosing a resolution of the Kansas Improved Stock-Breeders' Association complaining that the anti-trust laws of the United States are being violated by the beef-packing companies to the detriment of the complainants.

In reply, you are informed that in May, 1903, the Federal Government obtained an injunction against the leading beef-packing companies and firms, and also against a large number of individuals, restraining them from violating the provisions of the anti-trust act, and so far as the Department is advised they have obeyed the injunction. If you have any evidence of new violations of the law or of violations of the injunction, forward it to S. H. Bothen, Esquire, United States Attorney, Clea-

THE KANSAS FARMER

go, Illinois, and it will receive prompt consideration.

I enclose a copy of the court's opinion and decree in the beef-trust case.

Respectfully,

P. C. KNOX.
Attorney-General.

Replying to Attorney-General Knox's request for information of violations of the law, Mr. Heath called attention to the fact that in the nature of the case stockmen could possess only clues to evidence, and that they would be unable to present complete and conclusive evidence such as would convict in court. He suggested that with these clues the special agents of the Government ought to be able to perfect the evidence, and that, in the view of the stockmen, competent special agents ought to be assigned to the work.

The Garfield investigation followed, and resulted in a published report which was ridiculed by the press throughout the country.

After accumulating evidence enough to convict the members of the trust and getting the matter fairly into court, the Attorney-General was confronted by the showing that this evidence had been given to Commissioner Garfield under promise of immunity from prosecution. It developed that, under this promise of immunity the members of the trust made haste to confess their guilt. As a crowning piece to this gigantic blunder of the son of a former President, the judge before whom the case was tried strained the law to favor the self-confessed culprits and set them at liberty.

It is not surprising that the President and the Attorney-General are laying before Congress this strong case of outrage in the name of the law with a view of having it made impossible to again thus obstruct the administration of justice. Every member of Congress from the stock-growing States should favor such amendment of the law as will make it impossible for the guilty to escape by confessing his guilt, even to Commissioner Garfield.

INFLUENCE OF THE MOON.

EDITOR KANSAS FARMER:—I would like to know through the columns of the KANSAS FARMER whether it makes any difference in which sign of the moon potatoes are planted in order to secure a good crop.

MATT. WINTERSCHEIDT.

Brown County.

In the fall of 1860 a 15-year-old boy was driving home from town after having delivered a load of wheat at the mill. About three miles from town there was a settlement of thrifty people from Pennsylvania. The women of this community produced vegetables in their gardens, carried them to town in baskets strapped to their backs, and were usually rejoiced on returning with the money they had received for their vegetables. These women never asked to ride on a loaded wagon, but were glad to accept an invitation to ride home when the empty wagon returned. One such mounted the high spring seat on top of the double wagon-box beside the 15-year-old boy above mentioned. She was talkative. Everybody was then speculating on the prospect for war. The following conversation took place:

"What you denk, will be war?"

"Some people think there will, but others think there will be more talk than blood."

"O, our nachbar was to house gesternd abend und he say he see a star und he looks blooty. He denk it is a sign of war. What you denk?"

This energetic woman's husband went to the great war which came soon enough. With her sons she continued to cultivate the farm. They added to the area lands now worth \$100 an acre. Her children went to school. Her grandchildren attended the State University and took honors. Her great-grandchildren are becoming leading citizens.

This good woman was doubtless confirmed in the opinion that the appearance of the planet Mars in the fall of 1860 was a porter of the war of 1861-5. But was it?

This woman who succeeded in producing the finest vegetables believed in planting when "the sign was right," but she neglected not to cultivate and to fertilize. Do her descendants who are equally successful give any attention to signs?

Another instance: A good farmer who rejoiced in the scriptural name, Jephtha, and who was a native of the great State of Ohio, was about to commence haying. Up early in the morning, his eyes naturally scanned the skies to see whether the weather promised fair or foul. The sun rose bright and clear and, after shining a few minutes, went under a cloud.

"No use to think of haying to-day,"

said Jephtha. "I have noticed all my life that if the sun gets up clear and then goes to bed again, it will be a rainy day. It's a sure sign. I never saw it fail."

The boys didn't believe much in signs and decided to keep a record on the "sure sign." It failed that day, and during that haying season "it missed oftener than it hit."

Some of Jephtha's descendants have attained prominence, some have become very wealthy, but not one of them pays any attention to signs, to changes of the moon, or to any of the vagaries which disturbed the repose of mind of their ancestor at planting time, at haying time, and at hog-killing time.

The successful farmer of the present day should be something of a scientist. He should lay aside all sayings and imaginings and depend upon recorded observations as to phenomena of nature. The official records fail to show any advantage from observing signs of the moon, neither do they show any influence upon vegetation on account of positions of the planets.

DIVISION OF INHERITANCE.

EDITOR KANSAS FARMER:—Will you please answer the following question: When both parents have died without making a will and all children are past 21 years of age, is any process of law necessary in dividing property if all can agree to division? A. M. OLSON.

Cloud County.

This correspondent does not state whether the property left by the parents consists entirely of personal property, entirely of real estate, or of both personal property and real estate.

In the division of personal property where the heirs are all of lawful age it is necessary to provide for the payment of all debts that the parents or either of them may have owed at death; to make sure that all heirs are included; and to make the division satisfactory to every heir. There being then no one at interest to complain, the division can be made without assistance of the Probate court, and no lawyer would be needed. If there is any liability that any of the heirs may change his mind and become dissatisfied, it will be well to draw up a paper stating which property is assigned to each heir and that each accepts such division in full satisfaction of his claims against the estate. This agreement, signed by each heir, may be placed in the hands of a disinterested third party, for instance the bank, for safe keeping.

There is probably real estate also to be distributed. In this case the conditions mentioned as incident to the division of personal property have to be observed, and the matter might be settled by mutual consent and without danger of future complications were it certain that none of the holders would ever desire to sell their lands. Purchasers of lands are, wisely, particular to have the official records show perfect succession of title. The record in this case would not show conclusively that all debts had been paid, or that all of the heirs had received their share to which they were entitled. Such lack in the record would "cloud" the title to such an extent as to seriously reduce the value of the holding.

It is in all cases of this kind better to pass the estate through the Probate Court. One of the heirs, perhaps the oldest brother, should ask the Probate Judge to appoint him administrator. The other heirs can signify their acquiescence in the appointment and their agreement as to the division of the property. If there are no debts, or the heirs have provided for the payment of the debts, there need be no heavy expense. If the case were in Shawnee County, the Probate Judge would render all necessary assistance and no lawyer would be required. The entire cost would probably be \$12 to \$15. The records of the Probate Court would then make clear the title to properties and the possibility of future complications would be avoided.

The case is not quite so simple where there are minor heirs, but where all want to do right and all agree there need be no great expense.

Young readers of the KANSAS FARMER of a few years ago were greatly pleased with the "Autobiography of a Collie Dog." They will again be pleased on following the "Autobiography of a Pony" by the same careful writer, a young lady who chooses to have her excellent writings appear first in this paper. After its publication in the KANSAS FARMER, the "Autobiography of a Collie Dog" was issued in book form by a prominent publishing house. Those who enjoy going down into the mental and emotional phases of animal life following the insight of one who

has an unusual intuitive appreciation of their experiences as well as an insight into their relations with people will enjoy the "Autobiography of a Pony," while those who can not, like the young lady who writes these stories, get into close sympathy with animals will surely be benefited by getting as close as they can.

Breeders of pure-bred stock will be interested in the letter of Dr. N. S. Mayo on "The Live Stock Industry of Cuba." The development of the stock industry in the island under the able guidance of Dr. Mayo as Chief of the Department of Animal Husbandry is likely to call for importations of well-bred animals from the United States.

The late snows and early rains of the spring of 1906 have provided in the soil and subsoil of a very large proportion of Kansas as much moisture as is used in growing and maturing a full crop of corn, wheat, or oats. The problem of retaining this moisture where it may contribute to the growth of the crops is one of first importance.

Frank Hall, of Denver, Col., is now on the ocean with 2,100 head of Hereford cattle purchased in Herefordshire, England. The bunch is valued at \$80,000 to \$100,000.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

VOICE OF THE PEOPLE.

G. A. Biddle, M. D., of Emporia, Kansas, writes: Please find enclosed \$1.00 for which send me THE KANSAS FARMER

You will remember, perhaps, that I stopped my FARMER some time ago, but I feel like there might be something going on that I do not hear of. The reason I stopped the FARMER was that there is too much stuff in it that is absolutely without interest to me and should not interest any one else. I object to filling the paper up with continual stories, but as I am not directing the policy of your paper and find you can still do business even if I do stop my busscription—at least I have not heard of your suspension—I will do like the Hon. Cy Leland in the boss buster business, "If I can't beat em—will jine em." So just send along your paper—stories and all—and I will take down "my kick."

Mr. Kingsley, of Independence, Kansas, writes: "I am sending a new name with my own for the \$1.00 subscription offer. The new subscriber is John P. Wetmore, Independence, Kansas."

"My name must be among the oldest on your list. I know I was taking THE KANSAS FARMER in 1873, and suppose I shall take it as long as I live."

After the Lawbreakers.

EDITOR KANSAS FARMER:—Please allow me to commend THE KANSAS FARMER, not in terms of flattery, but in words of soberness and truth, for the publication of the International Bible lesson entitled "Temperance" by David W. Clark.

I wish I had a clarion voice that could be heard from the Atlantic on the East to the Pacific on the West, and from the Lakes on the North to the Gulf on the South. I would sound it forth until every voter in this broad land of ours could find no rest until he became anxious to do all in his power to abolish the liquor business, root and branch.

I most heartily approve of Governor Hoch's plan to oust the derelict State officers for violating the most sacred obligations that men can take upon themselves in assuming the duties conferred upon them by the laws of the State.

It is certainly too late for the Supreme court to undertake to decide that the plan is unconstitutional. Such a decision at this juncture would be greater complicity with the rum power than was the Dread Scott Decision of ante-bellum times. Cruel as was the enslavement of the African race, it bears no comparison with the shackles that now bind the white race and the

colored people of the United States.

At such a time as this, THE KANSAS FARMER should keep giving its powerful influence in favor of the rigid enforcement of the prohibitory law, urging the Governor to push his plan of ousting every perfumed officer of the State.

If prohibition in Kansas falls flat to the ground, hordes of liquor-mongers will override the State and everything good and noble will be left in heaps of ruins. It must not be.

Mordecal said to Queen Esther not to think that she would escape if she held her peace at that crucial moment. Let all the lovers of sobriety and Christianity be aroused to action and "stand up for Kansas" like men.

Dear Editor do not call me insane for I am duly sober and I am aware that THE KANSAS FARMER has much to do in its legitimate line as an agricultural magazine, but this subject vastly outweighs everything else now touching our interests, and this is my apology for writing this letter. God is with us. Keep marching around Jericho and the walls will fall.

BENJAMIN NICHOLSON.

Sumner County.

Shawnee County Boys' Corn-Growing Contest.

EDITOR KANSAS FARMER:—The committee in charge of the boys' corn-growing contest of Shawnee County met March 31, and offered \$35 in prizes for pure-bred corn raised by boys from 12 to 18 years of age. The money will be divided as follows: \$10 for the best ten ears, \$8 for the second, \$6 for the third, \$4 for the fourth, \$2 for the fifth, and \$1 each for the next five. Leaflets giving full information will be furnished by the committee: F. P. Rude, North Topeka, of Indian Creek Grange; Emery Brobst, of Oak Grange; and C. A. Klein, of Berryton. Pure-bred seed-corn will be furnished at cost to the boys, and can be obtained at Forbes Bros., and of members of the committee. This contest is open to all farmer boys within the age limit. F. P. RUDE, \$53.

Upon reading Luther Burbank's article on "How Plants are Trained to Work for Man," printed in "The Youth's Companion" for March 22, one can not help thinking that only a Methuselah could reap the full rewards of his own plant-breeding. The article indicates that the author has already achieved the end aimed at in some of his experiments. On the other hand, many of them involve so many crosses, such careful selection season after season, that the result of them can hardly be known within the span of three score years and ten. This contribution to "The Youth's Companion" is said to be the first word that Luther Burbank has ever yet said about himself or his work in print, and it is likely, therefore, to be read with interest by every one interested in horticulture.

Table of Contents

Alfalfa hay for horses.....	372
Aalkland, crop for.....	372
Attractions of our early homes (poem).....	381
Beef-trust cases, origin of the.....	369
Bromus inermis.....	372
Campers, undesirable.....	369
Cheat instead of English blue-grass.....	371
Click-beetles, two kinds of.....	379
Corn-growing contest in Wilson County, boys'.....	373
Cow, developing a.....	390
Crops in Southwestern Kansas.....	372
De Stael, Madame.....	386
Domestic life, training for.....	380
Eggs, turning the.....	388
English walnuts.....	386
Evergreens, transplanting large.....	386
Experience with barley, some.....	371
Fleetfoot, the autobiography of a pony.....	381
Fruits, growing of pitted.....	385
Grains, early sown.....	386
Grape growing.....	384
Hedge, how to kill a.....	371
Hog pasture, seedling a.....	371
Imports and exports, February.....	385
Inheritance, division of.....	370
Live stock industry of Cuba, the.....	374
Location of barn and care of yard.....	390
Ministries (poem).....	380
Moon, Influence of the.....	370
Mulch, harrowing to maintain.....	371
Pasture for horses and milch cows.....	372
Peach-trees, care of.....	388
Poultry notes.....	386
Rabbit-trap, the Wellhouse.....	371
Sand lucerne.....	386
Seed, production and care of home-grown.....	378
Silo, galvanized iron.....	391
Sweet corn vs. Indian corn as poultry food.....	388
Stale bread, uses for.....	380
Sunday-school lesson.....	386
Swine-feeding for profit.....	374
Training for the show-room and notes about exhibition poultry.....	388
Traveling libraries, the.....	383
Western farmers and Western butter.....	390
Wheat, growing.....	371
Y. M. C. A. building at Kansas State Agricultural College.....	369

Agriculture

Some Experience with Barley.

EDITOR KANSAS FARMER:—On account of the high price of shorts and bran, I concluded, in 1902, to try to secure some kind of grain which could be raised on our farms, that had plenty of protein to help balance the corn-ration for all kinds of stock. Speltz was lauded to the skies by the Northern seedsmen. I procured a small quantity and raised some. I was disappointed in it as there were too many husks. In 1903 I sowed 8 acres with six-rowed spring barley on river-bottom land. On May 27 the floods came and the barley, with all our other crops, was washed away. In 1904 I sowed about 8 acres near the river. It grew very fine and was ready to cut before fall wheat, but after it was in the shock, the river rose high enough to float all but about 40 shocks. We saved that for seed and sowed it in 1905. A part of the seed saved was sown on ground where there was some volunteer wheat and was choked out; but we thrashed enough to give it a fair trial and found it far superior when ground, to corn chop and Kafir-corn. Horses could stand the heat a great deal better after eating it; it made excellent slop for hogs when ground fine; and for milch cows, it is far superior to bran and shorts.

In the fall of 1904 I received a bulletin from the McPherson Experiment Station giving the results of the yields of various kinds of grain, and this said that Tennessee winter barley yielded 62½ bushels per acre. I immediately wrote for and obtained one bushel which was sown October 8 on good soil. It came up strong and made a fine growth. It was not damaged by the winter in the least and on June 9 it was cut and shocked. The ground was measured and there was just 89 rods. The crop was thrashed as soon as the wheat was cut and I had 35½ bushels of fine grain. There was considerable loss handling such a small quantity. I think there will be no difficulty in raising from 50 to 80 bushels per acre on our rich bottom-lands. I distributed a little seed to some of my friends and saved the balance. For Kansas farmers and breeders, I believe barley is a bonanza, equaled only by alfalfa.

Dickinson County. WM. RAMSEY.

Seeding a Hog Pasture.

I desire to seed for hog pasture a piece of ground consisting of black creek-bottom land and limestone slope. The latter is underlaid with heavy clay subsoil and in places is somewhat seepy. This land is now in English blue-grass with a little white clover, but the stand is poor. A part is now in pasture and will have hogs on it this summer. I wish to sow this piece in white clover. Can I secure a stand while hogs are on it? The balance of the ground will have no stock on it. I shall use a mixture of Alsike, red, and white clover, with redtop for seepy spots. At what time and in what manner should I do the seeding in order not to destroy the grass already there? I also desire to seed a timber slope which I have thinned and cleared of underbrush. I shall use Kentucky blue-grass and white clover. At what time should I sow?

At what time should rape be sown for hog pasture, and how much seed should be used per acre?

I have a Duroc sow that has farrowed and raised fifty-two pigs in a little less than twenty-four months. This can be beat but how many KANSAS FARMER readers can do it?

Osage County. H. G. JUMPER.

Sow the clover- and grass-seeds on the English blue-grass meadow as soon as possible. In fact it might have been a good plan to have seeded on the late snow. Sow now, however, while the ground is still freezing and thawing, before it becomes packed by rain, and a good part of the clover- and grass-seed will become covered with soil and sprout, or it may be advisable to run the harrow over the field two or three times just as soon as the soil is in fit condition, or immediately after sowing the grass- and clover-seed. With early seeding the harrowing would probably be all the cultivation really necessary, but if you do not seed until after the ground becomes firm then I would advise disking and harrowing in order to loosen the surface to receive the seed. The disking will probably not injure the English blue-grass, and may benefit it.

The field could be pastured lightly with hogs, if they were kept from root-

ing, and I would advise that they be kept off during wet weather when the ground is soft. It will not do to pasture very closely; in fact, it would probably be better not to pasture during the first part of the season.

I would advise also to sow the grass and clover as soon as possible in the timber lot—the earlier the better. Unless you can cultivate the ground to cover the seed, it will not be advisable to sow after the ground becomes settled and firmed by spring rains.

If rape is sown broadcast or in close drills four to five pounds of seed is required per acre, but if planted in rows thirty inches apart two pounds of seed per acre is sufficient, and even less may be planted and give a good stand. On the whole, I think it is preferable to sow in close drills rather than to sow broadcast and give no cultivation after planting.

You may hear from some of the KANSAS FARMER readers regarding the Duroc sow with fifty-two pigs.

A. M. TENNEYCK.

Cheat Instead of English Blue-Grass.

I sowed some grass-seed last fall supposing it was English blue-grass, but to my disappointment it turned out to be cheat. I mixed with this cheat-seed 27 pounds of alfalfa-seed and 35 pounds of Bromus inermis. These three kinds of seed were mixed together and sown on nine acres of land that was plowed early and deep, being well settled before it was seeded. I drilled in the seed with a disk-drill, secured a good stand and thought I would pasture it to keep the cheat from seeding. What treatment would you advise me to give this field in order to secure a better stand of alfalfa? I thought some of disking the ground after harvest and seeding to alfalfa. Would you disk or plow or what would you suggest? There seemed to be considerable alfalfa up last fall.

Washington County. JNO. BROWN.

Unless the Bromus inermis has made a fair stand along with the alfalfa, I would advise you to plow this field and seed down other land to grasses and alfalfa this spring. As a rule it is not satisfactory to attempt to thicken a stand of alfalfa or grasses, and there would be a special objection in this case since the land is seeded with cheat.

If there is a part of a stand of Bromus inermis along with the part of a stand of alfalfa you have mentioned, I would leave the field alone and not attempt to reseed it. I would either pasture off the cheat, as you have suggested, or cut the grass early to keep the cheat from seeding. Bromus inermis will thicken up very rapidly, and a half a stand of grass will often spread so as to give a very good stand the succeeding year. Probably the alfalfa is thick enough to furnish good pasture with a good stand of grass. A. M. TENNEYCK.

Harrowing to Maintain Mulch—Growing Wheat.

Will you kindly give me some information in regard to harrowing wheat? What month would you suggest for harrowing in this section of the country, and how often would you harrow? What kind of harrow would be the best to use? A. A. BEITZER.

Saline County.

We have not carried on extensive experiments in harrowing wheat at this station. For the last three years I have harrowed a field of wheat each spring but have not made a yield test. From observation, there seemed to be little or no effect on the growth or yield of the wheat, but the last three seasons have really been too wet for the best development of wheat. The harrowing is essentially for the purpose of conserving soil-moisture. In a drier season we may expect more beneficial results. I have not observed that the harrowing injured the wheat. Our plan has been to harrow once or twice in the spring after the wheat has started well. It is not usually advisable to harrow wheat in the fall and it is best not to harrow too early in the spring, but when the wheat has made some start and the roots of the plants are well established, wheat may be harrowed without injury and often with much benefit. The harrowing will not only loosen the soil, producing a mulch which tends to conserve the soil-moisture, also producing a favorable surface for receiving rain, but the harrowing destroys the young weeds and gives a cleaner crop of wheat than may be secured without harrowing, especially if the soil is inclined to be weedy.

W. H. Campbell in his "Campbell's Method of Soil Culture," recommends harrowing the wheat, beginning in the spring and continuing the harrowing until the wheat is a foot or eighteen inches high. In the dry climate of the

semi-arid regions, the harrowing and the continuing of the harrowing during the early growth of the wheat may often prove beneficial in conserving soil-moisture and producing larger yields of wheat than may be secured without the cultivation. Mr. Campbell claims excellent results in the use of his method on the Pomeroy farm at Hill City, in Graham County, Kansas. The average yield of wheat on the Pomeroy farm, resulting from the practice of the Campbell method of culture, was something over 40 bushels per acre, while the average yield from surrounding farms was not over 20 bushels per acre. The Campbell system includes much more than the harrowing of the wheat, and I believe that on the Pomeroy farm the practice has been to summer-fallow, practicing summer culture every two or three years, during which season no crop was grown. Experiments in the harrowing of wheat are being undertaken at the Fort Hays Branch Experiment Station, Ellis County, Kansas.

The weed-harrow, or weeder, is perhaps better adapted for harrowing wheat than the common straight-tooth or slanting-tooth harrow. The weeder is somewhat objectionable on account of the wheels. When the ground is reasonably firm the common harrow may be used without injuring the wheat. I question whether it is necessary to continue the harrowing after the wheat covers the ground well, unless very heavy rains firm and puddle the soil, destroying the mulch of mellow earth. Usually this will not occur. I have harrowed wheat when it stood 5 or 6 inches high and had stooped so as to about cover the ground, and the mulch thus produced was still in evidence at harvest time. In this experiment the ground was harrowed twice on the same day. The yield of wheat from the harrowed field was 3 bushels per acre on the average above that from the field adjacent not harrowed, and at harvest time the soil of the harrowed field contained 2 inches more water in the first six feet of soil than that of the field which was not harrowed. The wheat on the harrowed field ripened about two days later than the wheat on the check plot. This experiment was carried on at the North Dakota Experiment Station with spring wheat. It was observed in the same experiment that wheat harrowed before it had stooped much was injured in the stand and gave a less yield of grain than the wheat not harrowed. It appears, therefore, that even with winter wheat there may be some danger of injuring the wheat if it is harrowed too early in the spring. A. M. TENNEYCK.

Sand Lucerne.

Is there a kind of alfalfa-seed that grows and thrives better on light, thin prairie-land than does other kinds? If so, what is the name of the seed and where may we buy a few bushels of it?

Chautauqua County. J. O. TULLOSS.

You perhaps refer to the Turkestan alfalfa. This is a hardy strain of common alfalfa, which has been brought to this country from the dry plains of Turkestan where it has been growing for perhaps a century. Apparently this variety of alfalfa is somewhat harder than the common alfalfa grown here, and may be better adapted for growing in Western Kansas and the Northern part of the United States. Possibly also it may succeed better than common alfalfa on thin land in Southern Kansas. We sowed a plot of it three years ago alongside of a lot of common alfalfa, but the Turkestan alfalfa does not grow so rank and has not yielded quite so well as common alfalfa. The trial was made on our upland soil, land rather poor in fertility. Pure seed of Turkestan alfalfa is hard to secure. The seed is advertised by Western seed companies. We secured seed three years ago from Northrup, King & Co., Minneapolis, Minn., and this company now advertises pure seed of Turkestan alfalfa. You may be able to get a small sample of seed also, from the U. S. Department of Agriculture. Write to T. B. Galiaway, Chief of Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C.

It may be that you have in mind land lucerne (*Medicago sativa*). This is a perennial, leguminous plant, resembling alfalfa; in fact, it belongs to the same group or family, the botanical name of alfalfa being *Medicago sativa*. We planted a plot of sand lucerne a year ago last fall; it made an excellent stand and produced several cuttings last year, but the hay is a little coarser and not so good in quality as alfalfa hay, although from analysis of the hay it appears that the feeding value of sand lucerne hay is practically equal to that of alfalfa. Sand lucerne is very highly recommended for

MAKE EVERY DAY COUNT
no matter how bad the weather.
You cannot afford to be without a
TOWER'S WATERPROOF OILED SUIT OR SLICKER
When you buy look for the
SIGN OF THE FISH
TOWER'S
FISHERMAN!
A. J. TOWER CO. BOSTON, U. S. A.
TOWER CANADIAN CO. LTD. TORONTO, CANADA

BOOK FREE **FARM TELEPHONES!** How to put them up—what they cost—why they save you money. Write J. Andres & Sons, 823 W. Water St., Milwaukee, Wis.

FENCE STRONGEST MADE. Built strong chick-en-tight. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalogue Free. **COILED SPRING FENCE CO.**, Box 255, Winchester, Indiana.

LAWN FENCE Made of Steel. Lasts a lifetime. We have no Agents. Sold to users at Wholesale Prices. **7 cts. a foot up.** Cheaper than wood. Catalogue Free. **KITTELSON BROTHERS**, Box 399, Muscle, Indiana.

\$10.00 Sweep Feed | \$14.00 Galvanized Grinder.
We manufacture all sizes and styles. We will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

CEMENT FENCE POST or Building Blocks WITH THE **CROUCH \$10 MACHINE**
Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free. Ellsworth Crouch, Oakland, Kansas.

Our Factory to you. A Genuine Split \$35 HICKORY
Built to your order. 30 days free trial. Year guarantee. 1906 catalog, 100 styles, free. The Ohio Carriage Mfg. Co., H. C. Phelps, Pres. Station 201, Cincinnati, O.

SPLIT HICKORY
Tell us what style vehicle you need.

The parties running the two presses at Vera, I. T., say that two men can accomplish more with your press than three can with any other. F. W. Taylor & Co., Kansas City, Mo.

Satisfaction guaranteed. Manufactured by the AUTO FEDAN MAY PRESS CO., 1084 Jefferson St., Topeka, Kansas

You Can Thresh at your convenience, when the grain is ready and save stacking, save help and save grain if you use a **BELLE CITY SMALL THRESHER**.

Good capacity, light, compact, durable, cleans all grains and seeds equal to any. No experts needed. Low in price. Fully guaranteed. Write at once.

Belle City Mfg. Co., Racine, Wisconsin. Box 78.

BIG ILLUSTRATED CATALOGUE FREE

Modern Silage Methods
That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

Twenty-five Bushels of WHEAT to the Acre



means a productive capacity
in dollars of over

\$16 per Acre

This on land, which has cost
the farmer nothing, but the
price of tilling it, tells its own
story. The

Canadian Government

gives absolutely free to every settler
160 acres of such land.

Lands adjoining can be purchased at
from \$6 to \$10 per acre from railroads
and other corporations.

Already 175,000 farmers from the
United States have made their homes
in Canada.

For pamphlet "20th Century Canada,"
and all information apply to Superintendent
of Immigration, Ottawa, Canada;
or to the following authorized
Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.

Combination Thief - Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is
complete without one. Price, \$1; postage paid to
any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio

Send your orders quick.

IWAN'S POST HOLE AUGER

Best earth auger in the world. For Fence and
Telephone Post Holes, Wells, etc. Three times
the work ac-
complished with an
Iwan Auger than with any other. Makes
holes smoothly
and quickly; empties easily; is very durable. Used by U. S. Govt. 8, 4, 6,
8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 55410, 55411, 55412, 55413, 55414, 55415, 55416, 55417, 55418, 55419, 55420, 55421, 55422, 55423, 55424, 55425, 55426, 55427, 55428, 55429, 55430, 55431, 55432, 55433, 55434, 55435, 55436, 55437, 55438, 55439, 55440, 55441, 55442, 55443, 55444, 55445, 55446, 55447, 55448, 55449, 55450, 55451, 55452, 55453, 55454, 55455, 55456, 55457, 55458, 55459, 55460, 55461, 55462, 55463, 55464, 55465, 55466, 55467, 55468, 55469, 55470, 55471, 55472, 55473, 55474, 55475, 55476, 55477, 55478, 55479, 55480, 55481, 55482, 55483, 55484, 55485, 55486, 55487, 55488, 55489, 55490, 55491, 55492, 55493, 55494, 55495, 55496, 55497, 55498, 55499, 554100, 554101, 554102, 554103, 554104, 554105, 554106, 554107, 554108, 554109, 554110, 554111, 554112, 554113, 554114, 554115, 554116, 554117, 554118, 554119, 554120, 554121, 554122, 554123, 554124, 554125, 554126, 554127, 554128, 554129, 554130, 554131, 554132, 554133, 554134, 554135, 554136, 554137, 554138, 554139, 554140, 554141, 554142, 554143, 554144, 554145, 554146, 554147, 554148, 554149, 554150, 554151, 554152, 554153, 554154, 554155, 554156, 554157, 554158, 554159, 554160, 554161, 554162, 554163, 554164, 554165, 554166, 554167, 554168, 554169, 554170, 554171, 554172, 554173, 554174, 554175, 554176, 554177, 554178, 554179, 554180, 554181, 554182, 554183, 554184, 554185, 554186, 554187, 554188, 554189, 554190, 554191, 554192, 554193, 554194, 554195, 554196, 554197, 554198, 554199, 554200, 554201, 554202, 554203, 554204, 554205, 554206, 554207, 554208, 554209, 554210, 554211, 554212, 554213, 554214, 554215, 554216, 554217, 554218, 554219, 554220, 554221, 554222, 554223, 554224, 554225, 554226, 554227, 554228, 554229, 554230, 554231, 554232, 554233, 554234, 554235, 554236, 554237, 554238, 554239, 554240, 554241, 554242, 554243, 554244, 554245, 554246, 554247, 554248, 554249, 554250, 554251, 554252, 554253, 554254, 554255, 554256, 554257, 554258, 554259, 554260, 554261, 554262, 554263, 554264, 554265, 554266, 554267, 554268, 554269, 554270, 554271, 554272, 554273, 554274, 554275, 554276, 554277, 554278, 554279, 554280, 554281, 554282, 554283, 554284, 554285, 554286, 554287, 554288, 554289, 554290, 554291, 554292, 554293, 554294, 554295, 554296, 554297, 554298, 554299, 554300, 554301, 554302, 554303, 554304, 554305, 554306, 554307, 554308, 554309, 554310, 554311, 554312, 554313, 554314, 554315, 554316, 554317, 554318, 554319, 554320, 554321, 554322, 554323, 554324, 554325, 554326, 554327, 554328, 554329, 554330, 554331, 554332, 554333, 554334, 554335, 554336, 554337, 554338, 554339, 5543310, 5543311, 5543312, 5543313, 5543314, 5543315, 5543316, 5543317, 5543318, 5543319, 55433100, 55433101, 55433102, 55433103, 55433104, 55433105, 55433106, 55433107, 55433108, 55433109, 55433110, 55433111, 55433112, 55433113, 55433114, 55433115, 55433116, 55433117, 55433118, 55433119, 554331100, 554331101, 554331102, 554331103, 554331104, 554331105, 554331106, 554331107, 554331108, 554331109, 554331110, 554331111, 554331112, 554331113, 554331114, 554331115, 554331116, 554331117, 554331118, 554331119, 5543311100, 5543311101, 5543311102, 5543311103, 5543311104, 5543311105, 5543311106, 5543311107, 5543311108, 5543311109, 5543311110, 5543311111, 5543311112, 5543311113, 5543311114, 5543311115, 5543311116, 5543311117, 5543311118, 5543311119, 55433111100, 55433111101, 55433111102, 55433111103, 55433111104, 55433111105, 55433111106, 55433111107, 55433111108, 55433111109, 55433111110, 55433111111, 55433111112, 55433111113, 55433111114, 55433111115, 55433111116, 55433111117, 55433111118, 55433111119, 554331111100, 554331111101, 554331111102, 554331111103, 554331111104, 554331111105, 554331111106, 554331111107, 554331111108, 554331111109, 554331111110, 554331111111, 554331111112, 554331111113, 554331111114, 554331111115, 554331111116, 554331111117, 554331111118, 554331111119, 5543311111100, 5543311111101, 5543311111102, 5543311111103, 5543311111104, 5543311111105, 5543311111106, 5543311111107, 5543311111108, 5543311111109, 5543311111110, 5543311111111, 5543311111112, 5543311111113, 5543311111114, 5543311111115, 5543311111116, 5543311111117, 5543311111118, 5543311111119, 55433111111100, 55433111111101, 55433111111102, 55433111111103, 55433111111104, 55433111111105, 55433111111106, 55433111111107, 55433111111108, 55433111111109, 55433111111110, 55433111111111, 55433111111112, 55433111111113, 55433111111114, 55433111111115, 55433111111116, 55433111111117, 55433111111118, 55433111111119, 554331111111100, 554331111111101, 554331111111102, 554331111111103, 554331111111104, 554331111111105, 554331111111106, 554331111111107, 554331111111108, 554331111111109, 554331111111110, 554331111111111, 554331111111112, 554331111111113, 554331111111114, 554331111111115, 554331111111116, 554331111111117, 554331111111118, 554331111111119, 5543311111111100, 5543311111111101, 5543311111111102, 55433111111111

is practicable in Hamilton County, Kansas. In fact, I doubt whether dry-land farming may be successfully carried on in that section of the State without the practice of thorough tillage and cultivation of the soil, as outlined in the "Campbell Soil-Culture Manual." I refer you to Mr. Campbell's soil-culture manual for detailed information regarding his methods. Write to H. W. Campbell, Lincoln, Nebraska. I have mailed to you a copy of a letter which briefly describes the Campbell system of culture.

The durum wheat has been grown successfully at several points in Western Kansas. I met farmers in Thomas County last fall who claim to have harvested 40 bushels of durum wheat per acre last season. In Southwestern Kansas I have also received favorable reports of the growing of this wheat. The durum wheat is doubtless better adapted for growing in our Western climate and soil than any other variety of spring wheat. I find that Western farmers sow the wheat very early in the spring or even in the winter. It should at least be sown early in the spring. I have mailed you copy of a circular letter giving information regarding durum wheat.

I have learned that broom-corn is grown very successfully in the counties east of Hamilton and even in Hamilton County. This crop is a great money-maker. We have published no bulletins at this station regarding the handling and culture of broom-corn, but you can secure excellent bulletins from the United States Department of Agriculture, Washington, D. C.—address Office of Experiment Stations. A good bulletin on durum wheat may also be secured from the South Dakota Experiment Station, Brookings, South Dakota. I have mailed you seed-grain circular No. 1, which calls attention to the best producing varieties which have been grown at this station, at the Ft. Hays Branch Station, and at the U. S. and State cooperative station at McPherson, Kansas.

Other crops adapted for growing in the section named are sorghum and Kafir-corn, sorghum especially being grown for forage and Kafir-corn both for forage and for grain. The difficulty has been to mature Kafir-corn for the grain-crop—we need earlier maturing varieties. Some work is being done in breeding Kafir-corn at the Ft. Hays Branch Station, Hays, Kansas, with the purpose of securing earlier-maturing and better-producing strains or varieties.

Spring barley is grown successfully in many of the Western counties of the State, and alfalfa is being rapidly introduced and is a hardy crop wherever a stand may be successfully established.

I am also urging Western farmers to try the growing of flax more extensively. I see no reason why flax may not become a profitable crop for growing in Western Kansas the same as in Western North and South Dakota.

A. M. TENEYCK.

Boys' Corn-Growing Contest in Wilson County.

EDITOR KANSAS FARMER:—I enclose the circular letter which was mailed to 640 Wilson County boys eligible to the boys' corn contest being organized throughout the State. We have a good entry list at present, including one girl, and there are more coming in.

We could not supply all locations of the county with one variety, so have selected Hiawatha Yellow Dent, Farmers' Interest White, Boone County, White, and Hildreth's Yellow Dent.

All interests are cooperating to make the undertaking a success.

The Wilson County Farmers' Institute reorganized with the following officers: H. E. Bachelder, president; J. E. Thompson, vice president; Walter J. Burtis, secretary, and H. M. Starns, treasurer.

We will report again when the corn is distributed. WALTER J. BURTIS.

Fredonia, Kansas.

Following is the Wilson County circular:

Fredonia, Kans., Feb. 22, 1906.

Dear Sir:—The State of Kansas is being organized for the boys' corn-growing contest for 1906.

Each county is expected to organize independent. Wilson County will be organized by the Wilson County Farmer's Institute, assisted by County Superintendent, G. L. Atkeson. The cooperation of all parents is solicited.

CONDITIONS OF CONTEST.

One quart of pure seed-corn will be furnished without charge to each farmer's boy between the ages of 12 and 18 who will agree to plant it carefully, cultivate it well, and exhibit ten ears of corn raised from that seed at the

County Institute and corn contest to be held next fall.

This Institute and corn contest will be held in Fredonia at the court house sometime between the middle of October and the middle of November. Men of experience will be present and give instruction in judging corn. Each boy will be expected to prepare a brief statement as to date of plowing the ground, kind of land, methods of preparing for planting, method and date of planting, methods of cultivation, date of gathering his samples, statement of number of mature stalks in plot on the first day of August and also the number of barren stalks.

The corn should be planted where it will not readily mix with other corn, but it must not be grown on a city lot.

A medium maturing and a late variety suitable to this locality will be selected by the institute committee and held ready for distribution at the court house Fredonia, Kansas, March 31. Boys who can not come to Fredonia for their sample of corn will notify the secretary of the institute and it will be mailed to them.

Ten prizes are offered for the best ten ears of corn, in order 1st \$10, 2nd \$8, 3rd \$6, 4th \$5, 5th \$4, 6th \$3, 7th \$2, 8th \$1, 9th \$1, 10th \$1. Some special prizes by individuals will be offered to be announced later.

The following entry is to be filled out and mailed at once to the secretary, Walter J. Burtis, Fredonia, Kansas. This is to be an application for seed.

Boys' name.....
Age
Father's or Guardian's name.....
Township
Postoffice

To raise funds for this contest each boy is requested to solicit small subscriptions from his friends, mailing what he can collect to either the State Bank or the Wilson County Bank, Fredonia, Kansas.

This money will be carefully accounted for and if enough is collected the prizes will be increased.

All the winners in the county contests will be eligible to enter the State contest to be held at Manhattan, Kansas, under the management of the State Corn Breeder's Association, January 1 and 2, 1907.

The State prizes will be announced later. For further information, apply to the secretary.

WALTER J. BURTIS, Secretary.
H. E. BACHELDER, President.

Hen's Eggs Wanted.

We've always had the "pie-habit"—now we're coming into the limelight as egg-eaters. Each year 80,000,000 of hungry Yankees want more "hen fruit" than sufficed for the previous year. It's really getting to be quite a serious question how we're going to get 'em fried, poached, and scrambled in quantities sufficient to satisfy us. Supply doesn't seem to keep pace with demand—which fact accounts for the other fact—that lots of times we don't get any eggs at all.

Now, if you travel about the country and keep your eyes open, you will be convinced that there are hens enough in sight to give every man his "two soft" seven mornings in the week, if each hen did her full duty. Which observation brings us square to the point where the "screw is loose"—they don't do it—no fault of the hens, either. The real trouble is, the hen-man doesn't know his business, or else he neglects it. He doesn't treat his hens in the way self-interest would seem to dictate. You can't expect a lot of hens confined in a closed house or yard, with no systematic or rational effort to supply what they would get in a natural state, to make a profit for the owner! Now, if you are planning to make your whole living, or even your "pin money" out of hens, there are two or three things you should certainly remember. First, don't be satisfied with scrub hens. Second (and here is the real point), don't attempt to keep them without giving a regular daily ration of a good tonic. Nothing in hen culture gives so large a return as this one thing, and the only tonic to use is Dr. Hess' Poultry Pan-a-ce-a, prepared by Dr. Hess & Clark, of Ashland, Ohio, and sold by all dealers. This has been the experience of all successful poultrymen. This preparation is not a stimulant, like pepper or something of the kind that excites unnatural production for a time.

Dr. Hess' Poultry Pan-a-ce-a does its work in a different way by assisting the hen to fully digest her food and send each element to its proper part in the hen's economy. Thus a daily feed makes bone, flesh, feathers and eggs, each to the extent of proper elements in the food. Dr. Hess tells us that a Poultry Pan-a-ce-a is a true scientific preparation. It is the result of painstaking experiment in his own yards. So certain are Dr. Hess & Clark of the wonderful value of Poultry Pan-a-ce-a and Instant Louse-Killer, that they cheerfully give a written guarantee that it will do all they say. If it does not you get your money back. Considering cost of ingredients and care taken in manufacture, these goods are remarkably cheap. It costs but a penny a day to feed thirty hens.

One quart of pure seed-corn will be furnished without charge to each farmer's boy between the ages of 12 and 18 who will agree to plant it carefully, cultivate it well, and exhibit ten ears of corn raised from that seed at the



In Actual Use

Keen Kutter Quality tells in the actual use of the tool. Keen Kutter Tools are not retired by an occasional knot or tough piece of material. They are made to stand hard work and lots of it. They are as good as new after poor tools have gone to the scrap heap. The

KEEN KUTTER

brand covers a complete line of tools. In buying any kind of tool just see that the name Keen Kutter is on it and you have assurance of full satisfaction. Keen Kutter Tools have been Standard of America for 36 years and are the best that brains, money and skill can produce.

Some of the kinds of Keen Kutter Tools are: Axes, Hammers, Hatchets, Chisels, Screw Drivers, Auger Bits, Files, Planes, Draw Knives, Saws, Scythes, Timers' Snips, Scissors, Shears, Razors, etc., and Knives of all kinds. If your dealer does not keep Keen Kutter Tools, write us and learn where to get them. Every Keen Kutter Tool is sold under this Mark and Motto:

"The Recollection of Quality Repains Long After the Price is Forgotten."

Trade Mark Registered.

SIMMONS HARDWARE COMPANY,
St. Louis, U. S. A. 298 Broadway, N. Y.
Send for Tool Booklet.



A CONCRETE SILO
Gedney Farms, White Plains, N. Y.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburban or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

We Prepay Freight on Fence

to your railroad station (40 rods or more) and guarantee the safe delivery of your shipment by the railroad company. In effect this makes you our next-door neighbor. Besides, we offer you a variety of styles to select from, several times greater than that carried by the best dealers—26 styles—one for every purpose on the farm.

Correct Construction. Advance Fence has the continuous stay—the stay wire is never cut, but runs continuously up and down across the fence for many rods without an end. Thus we preserve and utilize all the strength of the wire, about half of which is wasted in cut stay fences.

30 Days Free Trial. Place your order with us for what fence you need. After 30 days, if you do not like it, return it to us at our expense and get your money back. That's fair.

Write now for our free fence book and wholesale delivered prices—right now.

ADVANCE FENCE CO., 3775 Old St., PEORIA, ILL.



Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri



YARD FENCE HANDSOME, STRONG AND DURABLE. Almost as cheap as wood and lasts ten times longer. Sold direct to consumers on thirty days trial. Write for catalogue.

The Farmers' Fence Co.
MELVERN, KANSAS

Box 36.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

April 3, 1906—James Stock Farm, Willard, Kans., trotting-bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gilford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, Des Moines, Iowa, Manager.

October 20, 1906—W. R. Dawling, Norcastur, Kans. Poland-Chinas.

Swine-Feeding for Profit.

R. F. NORTON, SENIOR MEMBER OF FIRM OF B. F. NORTON & SON, BREEDERS OF TOP DUROC-JERSEYS, CLAY CENTER, KANS., BEFORE THE CLAY COUNTY FARMERS' INSTITUTE.

"The feeder builds to his ideal mold; His knowledge is measured out in gold."

The environment and diet of swine have been changed to suit the profit and convenience of man to such an extent that it now pays to have some succulent feed

animal with the least waste of nutrients, but, to be profitable, this combination must be such as not to be too expensive. Now corn and alfalfa, the very products we wish to market through the hog, and the very cheapest and easiest feeds produced on the Kansas farms, luckily make the very best balanced ration that can be had except milk. This leaves nothing more to be said except when and where one or both of these are not available. Having alfalfa and no corn, or high-priced corn, we may supply the grain ration from the wheat by-products or ground Kafir-corn. Bran and alfalfa do not make a balanced ration. They are too much alike in chemical make-up. Shorts or ground Kafir-corn is better. Tankage is not necessary to use with alfalfa for we already have the necessary protein in the alfalfa. Having the corn and no alfalfa (here is the hardest problem), milk is an excellent feed with which to balance, or if not available, then such succulent feed as rape, beets, or sorghum may be fed. I believe I have found no better feed, aside from alfalfa or milk, that does me more good in the feed ration than amber cane, especially for growing stock. And let me say now, I believe it pays and

despite the efforts to the contrary of some of his near relatives, the German plutoocrat, the French autocrat, and others on the other side of the waters, the American hog, the Kansas "mortgage-

food for 100 pounds of gain. Those weighing from 150 to 200 pounds required 480 pounds of food for 100 pounds of gain. Those weighing from 200 to 250 pounds required 498 pounds of food for 100 pounds gain. Those weighing 250 to 300 pounds required 511 pounds of food for 100 pounds of gain, or over 5 to 1. Pigs weighing 300 to 350 pounds took 535 pounds of food to make a gain of 100 pounds. This is one of the reasons why hogs are marketed lighter than formerly.

Here is the result of a feeding experiment of our own on a pig bought in January in Illinois, sired by Tip Top Notcher, champion boar of the World's Fair at St. Louis. (This hog weighed 1,120 pounds at 23 months old.) We fed shorts mixed with milk and one pound of tankage per day. The gain for seven days, ending February 24, was 17 pounds, and for the next week, ending March 3, just before he was six months old, the gain was 16 pounds—33 pounds in fourteen days. Not fat, but just growth. This pig weighed 175 pounds at six months.

Despite the efforts to the contrary of some of his near relatives, the German plutoocrat, the French autocrat, and others on the other side of the waters, the American hog, the Kansas "mortgage-

SLOAN'S LINIMENT



FOR MAN
AND BEAST.
KILLS PAIN
AND DESTROYS
ALL GERM LIFE.

CURES RHEUMATISM

WONDERFULLY
PENETRATING.
A COMPLETE
MEDICINE CHEST.

Price, 25c., 50c., and \$1.00.
Dr. EARL S. SLOAN,
615 Albany St., Boston, Mass.

KRESO DIP KILLS LICE

ON ALL LIVE STOCK
EASY & SAFE TO USE



BLUE CATTLE LOUSE

KRESO DIP
KILLS THIS
AND ALL OTHERS
RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write For Free Booklets
For Sale By All Druggists

PARKE, DAVIS & CO.

HOME OFFICES AND LABORATORIES:
Detroit, Mich.

BRANCHES: New York, Chicago, St. Louis, Boston,
Baltimore, New Orleans, Kansas City, Indianapolis,
Minneapolis, Memphis, U.S.A.; Walkerville,
Ont.; Montreal, Que.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes, Bog Spavin, Thoroughpin, Spavin, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

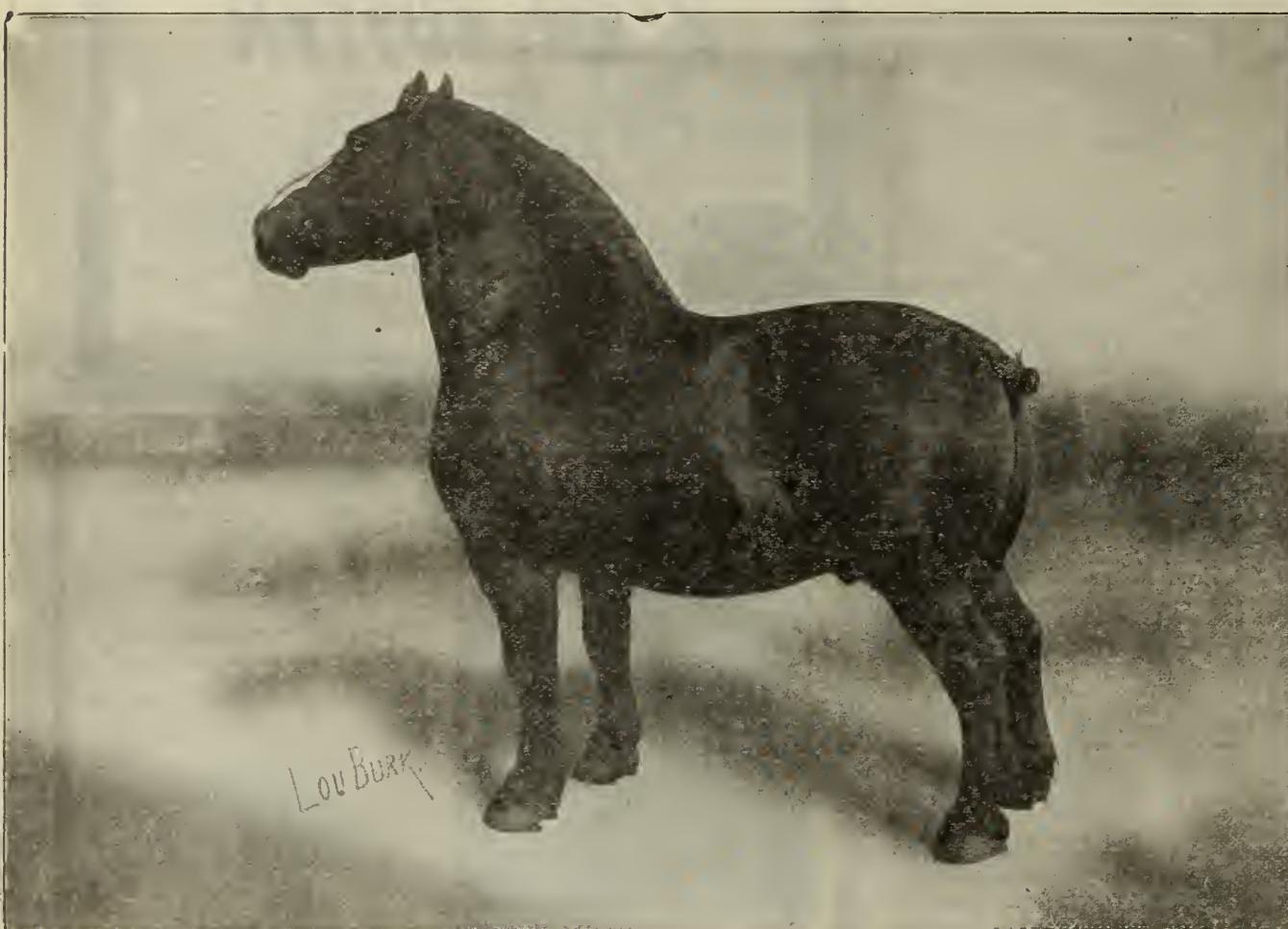
describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON,
Hendale, Kansas.



Iams' Prusant-De-Lux (29344) Royal Belgian black boy, 4 years old, weight 2210 pounds. A "cracker-jack," a money-maker. Imported and owned by Frank Iams, St. Paul, Nebraska.

extent that it seems little short of miraculous that they can be fed at a profit at all. But, to prove such is the case, it is only necessary to look about some farms and see the wonderful transformation in a few years brought about with the profit accrued from "feeding corn to hogs." And when we read the statistics of the business of the meat trust we naturally conclude that if there is no profit in feeding, somebody is woefully fooled.

Time was when people of corn-belts seemed to think all that was necessary to grow and fatten a hog was to give him plenty of corn and water and little if any exercise. But we have learned that although some may have succeeded fairly well by this method on cheap land and cheaper feed, yet it is too risky. Swine can not endure this treatment generation after generation and be profitable to the feeder. They must have exercise, especially during the growing period, and some more succulent food, as well as that with more protein for the building of bone and muscle. Such feeds are meat-meal, with 62½ per cent protein, tankage 60 per cent, oil-meal with 32 per cent, bran and alfalfa hay with 12 to 15 per cent, green alfalfa 5 per cent, as compared with corn with 10 per cent.

The profit of pig-feeding depends upon the cost of the feed used. Therefore, anything that cheapens the feed increases the profit, provided it is not done at the expense of the health of the animal. This calls for a balanced ration. A balanced ration is a combination of feeds that will nurture the

at all times, both for growing stock and fattening. If we depend too much on chemical analysis, however, we would discard all such feeds, but is not so much the actual nutrients we get from them as the balancer. It helps to get the most out of the other feeds and acts as a conditioner. Then if we wish to push the growth, especially of bone and muscle for breeding stock, we should use some feeds rich in protein, such as oil-meal, tankage, or meat-meal.

Now, a "balanced ration" is "all Dutch" to many feeders, so we just say do not depend on corn alone, especially for growing hogs, but give a variety and after that give them all the rape, alfalfa, or some other green or succulent feed, they want and let them balance the ration for themselves, and you can depend upon it, they will do it and do it right.

Now I will give you some facts and figures about feeding cattle and swine. Tests show that for 100 pounds of digestive nutrients consumed, cattle gain 12.7 pounds, sheep 14.3, hogs 29.2.

In a test given by the Wisconsin Experiment Station, it was shown that pigs of 15 to 50 pounds weight consumed 293 pounds of food for 100 pounds of gain, or nearly three pounds of feed for one of gain. In pigs of 50 to 100 pounds weight, 400 pounds of feed were required to make 100 pounds of gain. From 100 to 150 pounds weight, pigs required 437 pounds of

lifter," the "farm rent-payer," the "home-maker," is still doing business at the old stand.

The Live Stock Industry of Cuba.

EDITOR KANSAS FARMER:—My promise to write a short article on this subject for THE KANSAS FARMER has haunted me like Banquo's ghost, so to put it down, I will fulfill my promise.

Cattle.—The cattle industry is by far the most important. With the fine pastures of Guinea and Parana grasses, good water, and a mild climate throughout the year it is bound to increase rapidly. Before the last revolution in 1895, Spanish statistics gave the total number of cattle on the island at 2,500,000. These were practically destroyed during the war only about .06 per cent remaining. The Island is being restocked with cattle very rapidly and at present there are about 2,000,000 cattle and this amount is increasing by about 400,000 head per year. About one-third of this is natural increase, the remainder being imported. About one-third of the cattle imported come from the United States (mostly from Texas and Florida), the other cattle being imported from Columbia, Venezuela, and Mexico.

The greatest plague to the cattle-grower is the ticks. The ticks not only hinder the importation of northern pure-bred cattle for breeding purposes because the ticks inoculate them with the germs of Texas fever, but the greatest damage they do is as parasites sucking the blood of cattle and reducing them in flesh. During the

dry winter season they are very bad and it is necessary to bathe or dip the cattle to destroy the ticks.

Screw worms are also very common and it is necessary to watch wounds on all animals to keep them free from this parasite. Little attention has been paid in the past to improving the native cattle and the old method of free breeding is extensively practiced at present, but this is giving place to the selection of the best native bulls, and a goodly number of Hereford, Shorthorn, Aberdeen-Angus, and a few Holstein bulls have been imported. The demand is for short-haired cattle with large horns, the latter being important as they fasten in the ox yoke to the horns.

Horses.—Outside of the cities, the horses are of a small Spanish type and are used exclusively for saddle and pack animals. They are practically all naturally saddle gaited and take a running walk that will cover five or six miles an hour. They are hardy animals and will keep the gait all day.

In the cities are a good many American driving-horses and many American mules, the latter being used for carting. General farmwork is done with oxen, although the use of mules for farmwork is gradually increasing. The drawback to using mules for farmwork is the difficulty of getting satisfactory drivers.

Swine.—The breeding of swine seems to be one of the most profitable branches of the live stock industry. The native hogs are of the "razorback" type and get their living in the woods. The countryman takes his dogs and with a small sack of corn slung over his shoulder rides through the forests and brush, frequently cutting his way with his machete, a stout sword that they invariably carry. The dogs are large, fierce fellows that range through the dense brush and when they find any hogs they begin to hark. The hogs do not run away but gather in a bunch for protection. When the owner hears the dogs barking, he rides to the place, calls off the dogs, scatters a few handfuls of corn for the pigs and continues the hunt.

In some parts of the island are many native dogs that have run wild. These wild dogs catch some small pigs but as a rule the sows and boars successfully defend the pigs. The principal food of the hogs is the seeds of the royal palm, which are very rich, but the pork produced is oily.

We are trying some interesting experiments in crossing native sows with pure-bred Berkshire and Tamworth boars.

Sheep.—There are a few large, hairy sheep in the island but they are of little importance as there is little demand for mutton.

Goats.—There are a large number of milch goats kept in the cities and towns. They are the poor man's cows. Some of them give between three and four quarts of milk daily. The best of the milch goats are said to come from the Canary Islands. The common method of using goat's milk is to boil and burn the milk and then salt it before using.

Poultry.—Chickens are high, usually selling from 50 to 80 cents Spanish silver (\$1 American money buying from \$1.15 to \$1.40 Spanish silver). Eggs are usually worth 4 to 5 cents each Spanish silver. It would seem as if the poultry-business would be very profitable but there are many drawbacks in the shape of diseases and parasites. A number of Americans have tried the poultry-business on a large scale and have failed. Our Brown Leghorns and Black Minorcas have given excellent returns.

In glancing over this article it reminds me of a Spanish stew, in that it contains a little of everything. If you don't like the stew as a whole, you may be able to pick out some bits that will "pass muster."

N. S. MAYO.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of The Kansas Farmer, Topeka, Kan., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kan.

In addition to having this letter answered in The Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Paralysis in Duroc-Jersey sow.—I have a Duroc-Jersey sow twenty months of age that has been down for two months. She seems to be in good

It Pays to Feed DR HESS STOCK FOOD

(TONIC)

It pays because it increases digestion and prevents many forms of stock disease. Stock in ordinary condition only assimilate about 50% of the food eaten, and it is safe to estimate that 2/3 of this 50% of food digested is used to repair waste, leaving but a small amount of food to produce the profit. As it is the food digested and assimilated, above what is required to sustain life, repair waste, etc., that produces the profit, stockmen are naturally interested in increasing the digestion. Suppose you are feeding a profitable ration and your animals are thriving, if you can increase the digestive capacity of the animals from 50 to 60 or 75%, this amount of additional increase all goes to produce profit, as none of it is required for the "Food of Support." Dr. Hess Stock Food is guaranteed to increase the bone, muscle, and milk-producing value of the food sufficient to pay for itself many times over, besides curing and preventing stock disease. It is for stock of all kinds and in all conditions.

DR HESS STOCK FOOD

(TONIC)

is the prescription of Dr. Hess (M. D., D. V. S.), containing tonics for the digestion, iron for the blood, nitrates to expel poisonous materials from the system, laxatives to regulate the bowels. It has the recommendation of the Veterinary Colleges, the Farm Papers, is recognized as a medicinal tonic and laxative by our own Government, and is sold on a written guarantee at

5c. per pound in 100 lb. sacks; 25 lb. pail, \$1.60

(Except in Canada and extreme West and South.)

A tablespoonful per day for the average horse. Less than a penny a day for horse, cow or steer. If your dealer cannot supply you, we will. Remember, that from the 1st to the 10th of each month Dr. Hess will furnish veterinary advice and prescriptions free if you will mention this paper, state what stock you have, also what stock food you have fed, and enclose two cents for reply. In every package of Dr. Hess Stock Food there is a little yellow card that entitles you to this free service at any time.

Dr. Hess Stock Book free, if you will mention this paper, state how much stock you have and what kind of stock food you have used.

DR. HESS & CLARK, ASHLAND, OHIO.

Also manufacturers of Dr. Hess Poultry Panacea and Instant Louse Killer.

INSTANT LOUSE KILLER KILLS LICE.

health; eats and drinks well, and sits up, but is unable to control hind parts. I thought it might be kidney trouble and applied turpentine, but this did not help her. What is the trouble and how shall I treat it?

F. A.
Maple Hill, Kans.

Answer.—I fear your animal is paralyzed in the back to such an extent that it will be unsatisfactory to treat her. I fear that she has received some injury that is deep-seated, affecting the nerve supply to the limbs, and in that event it would not be possible to affect a cure.

Crude Black Oil for Lice.—Will crude black oil do to use on hogs to kill lice, applying around ears, back, and legs?

B. E. M.
Wellington, Kans.

Answer.—Yes, the crude black oil can be used on your pigs. The only objection is that it may be too strong and cause considerable irritation.

Soft Lumps on Stifle Joints.—I have an 8-months-old dun-colored horse colt, that has a large lump of a soft flabby nature over or in front of each stifle joint. These swellings were there when the colt was foaled in June, but did not seem to hurt him in any way until in December. He seems to be stiff in both hind legs and steps mincingly. The veterinarian here called it an excess of joint water and prescribed an acid liniment of some kind to be rubbed on every 3 days; also says he has never seen a similar case in his 38 years of practice. His treatment has been followed for ten weeks with no improvement. Can you tell me what the trouble is and prescribe a cure?

E. S.
Lousburg, Kans.

Answer.—From the description you give of the colt's condition the flabby swellings over the stifle being there since the animal was foaled, I question whether you will be able to effect a complete cure. You might try the following liniment: Four ounces of tincture of iodine, 2 ounces oil of turpentine, 2 ounces of tincture of cantharides, 1 pint of compound soap-liniment. Mix and shake well before using; rub into affected parts daily.

Sore on Gelding's Leg.—My 5-year-old dark bay gelding has a festering sore on right hind leg, that discharges bloody water. Have used copperas, blood-root, given salts internally, and rubbed on some liniment that took the hair off. What is the trouble and what shall I do for it?

C. C. L. S.
St. John, Kans.

Answer.—For the sore on the animal's leg would suggest that you use the following dusting powder daily: One ounce of Iodoform, 2 ounces of acetanilid, 1 1/2 ounce of tannic acid, 1 ounce of boracic acid.

HORSE'S SORE SHOULDERS CURED FREE SECURITY GALL CURE.

Name your dealer and this paper and we will mail you a
FREE SAMPLE



TELLS HOW TO CURE YOURSELF

of Blindness, Falling Sights, Catarracts, Granulated Eyes, Weak, Unrested or Bare Eyes, Tears, Runny and all other Eye Diseases at your own home as thousands of others have done. Book tells all about eye diseases, has colored pictures showing diseased eyes. Tell all symptoms of eye diseases. Cure falls eye test chart. Tells how to test eyes. Tells how to care for eyes and many other interesting facts. Sent free in all-well today. Address DR. W. O. COFFEE, 872 Century Bldg., Des Moines, Iowa.

Three sore shoulders, necks or backs while harnesses or like
SECURITY REMEDY CO.
Minneapolis, Minn.

BLACKLEGIDS

The SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No need to measure. No liquid to spill. No stabs, no pricks, no rotting. Just a little pill to be placed under the skin by a single thrust of the instrument. An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVIS & COMPANY.

Detroit, Michigan, U. S. A.
Branches: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

DEATH TO HEAVES
Guaranteed
A VETERINARY SPECIFIC
14 year old horse will cure Heaves \$1.00 per can. Of dealers, or express prepaid. Send for booklet. The Newton Remedy Co., Toledo, Ohio.

VETERINARY COURSE AT HOME
\$1200 a year and upwards can be made taking our Veterinary Course at home during spare time; taught in simplest English; Diploma granted; positions obtained successful students; cost in reach of all; satisfaction guaranteed; particulars free. **ONTARIO VETERINARY CORRESPONDENCE SCHOOL**, Dept. 17, London, Canada.

ONE MINUTE STOCK DIP
LIVE STOCK INSURANCE
The cheapest insurance you can get is a DISEASE PREVENTIVE. Don't wait to cure disease—keep it away from your live stock. You can do it with Dipolene, which kills all disease germs, sheep ticks, scab, lice, fleas and all body vermin. Perfectly harmless. Promotes health—sprinkled about barns and lots keeps them sanitary, wards off disease. Write for FREE book, "DIPPING FOR DOLLARS," MARSHALL OIL CO., Box 13, Marshalltown, Iowa.

SIGHT RESTORED FREE 80 PAGE BOOK
TELLS HOW TO CURE YOURSELF
of Blindness, Falling Sights, Catarracts, Granulated Eyes, Weak, Unrested or Bare Eyes, Tears, Runny and all other Eye Diseases at your own home as thousands of others have done. Book tells all about eye diseases, has colored pictures showing diseased eyes. Tell all symptoms of eye diseases. Cure falls eye test chart. Tells how to test eyes. Tells how to care for eyes and many other interesting facts. Sent free in all-well today. Address DR. W. O. COFFEE, 872 Century Bldg., Des Moines, Iowa.

header that should please the most exacting. The others are by Imp. Mariner, Flora's Chief and Godoy Butterly, all of the right kind in breeding and individual merit and the female part of the offering throughout are the same high quality. It is not too late to get a catalogue. If you address H. E. Bachelder, secretary, Fredonia, Kansas, and mention THE KANSAS FARMER, the same will be sent at once. Arrange to attend the sale.

Frank Iams of "Peaches and Cream"
Fame, not a "Dreamer of Dreams,"
But a Man Who "Does Things."

Mr. Johnson:—"Give my regards to Broadway," tell all the stallion buyers of Frank Iams, St. Paul, Nebr., the largest individual owner and importer of Percherons, Belgians and coach stallions. "The home of the winners" is a nut cracker. Iams is showing all competitors the race of their life. He is doing the business. Selling the stallions while his competitors are "knocking." Iams is not a dreamer of dreams but a man who "does things." He has the goods you read about. He makes every statement good. He has opened up a new barn of his noted prize winners, 80 top notchers, they must all be sold. These are Iams' famous "Peaches and Cream" stallions, that he is selling at \$1000 to \$1500 (few higher). Guaranteed better than any stallion sold to Farmers Co.'s" at \$3000 to \$5000. Iams "barrel of luck and push" makes him a "mascot" to buyers. He is saving thousands of dollars to buyers. He hypnotizes you with lusty black boys at let live prices. If you will visit him and do not say this is true, you get this \$100 cheerfully. Iams gives a breeding guarantee of 60 per cent, pays freight of horse and buyers fare. You say, why can Iams sell these State prize-winners and sons of winners so cheap? Iams is an up-to-date business man of 24 years' practical experience in importing and breeding horses at St. Paul, Nebr. He buys stallions by special train loads, he uses his own money, owns his farms, barns and horses; has no two to ten men as partners to divide profits with. Iams speaks the languages, this saves 20 per cent on each stallion. Iams is not in the great stallion trust, (runs his own business and has all competitors fighting him), because he sells all of his stallions at his home barns, employs no buyer or con salesman to sell you a \$1200 stallion for \$3000. Iams saves you all commissions and middle-man's profits, and sells stallions that are so good that they do not need to be peddled be sold. Here is the milk in the coanat.

Our illustration on page 374 is Iar Prusant-De Louroux (29344) Royal Belgian black boy, 4 years old, weight 2210 pounds. He is a big, massive, wide-as-a-wagon drafter with a leg under each corner. A smooth ever proportioned "black boy" with plenty of scale and finish. He stands on the best of feet and has 14-inch bone. He is a real cholly boy on dress parade. He makes all the Tony girls wink their eyes and say that is one of Iams' "Peaches and Cream" black boys that we read about. He has the goods and makes good his ad, and gives his customers a square deal. Write for greatest horse catalogue on earth. It will tell you how to save \$1000 and buy a first-class stallion. It's a business fetcher. Iams is the man behind the gun and is saving thousands of dollars to stallion buyers.

The Heath Shorthorn Sale.

In this issue will be found the announcement of the seventh annual sale of Shorthorn cattle from the Heath ranch, two miles south of Republican City, Neb. The sale is on April 4, Wednesday, and will consist of some thirty head or more of young cows, heifers, and bulls from this, one of the oldest established herds in Southwestern Nebraska and one of the best consignments ever offered. Nearly one-half of the offering is good, strong, lusty young bulls, from ten months old up. The young cows and heifers are nice young, well-bred animals, from a milking strain of cows, by well-bred sires, such as the straight-bred Scotch bull Lancaster Royal 168270 by Imp. Prince Oderic etc. Golden Victor, Jr., 175464. While the latter bull is the sire of most of the offering, the cows old enough to breed are in calf to Lancaster Royal. Several are by Aberdeen Lad 154974, one of the grand herd bulls. In this sale are three fine Double Standard Polled Durham bulls that are bred along good dairy lines.

Besides the cattle, there will be sold a lot of high-grade Percheron horses and several teams of work-horses and bred Poland-China gilts, farm implements, and other utensils, thus making it a very important sale. The catalogue is out and will be sent on application. Send for it and come to the sale and it will be a day well spent, whether you buy or not.

A Great Shorthorn Sale.

On Saturday, May 5, Darling Bros., of Coshocton County, Ohio, will sell about two car loads of registered Shorthorn cattle at Mankato, Kansas. Darling Bros. are proprietors of the famous Evergreen stock-farm and among the best known breeders of the East. Their herd consists of the best blood found in the country. Many of their animals have never been defeated in the show ring. They have won ribbons at the State fairs of Ohio, Kentucky, West Virginia and at the great exposition at Charlestown, South Carolina.

They inform us that this consignment will consist of about 25 head of bulls from one to two years old and that any one of them is good enough to be a herd-header. If you will write Cliff Darling, at Randall, Kansas, he will send you a catalogue of the consignment.

Gossip About Stock.

Col. C. M. Crews, the Topeka auctioneer so well known to stock men throughout the State, has been engaged by the Department of the Interior as auctioneer of the sale of certain town lots for the Osage Town Site Commiss-

sion and the first sale of the town site of Foraker on May 1.

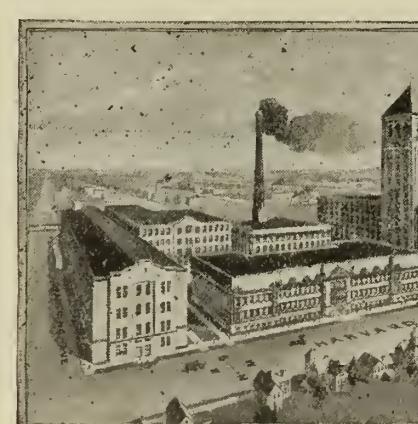
R. H. Weir, Oberlin, Kansas, proprietor of the Decatur County herd of Poland-Chinas, has an advertisement in this paper offering some fall boars for sale. These are good animals and well worth the money he asks for them. If you need an animal of this kind, kindly write him mentioning that you saw his advertisement in THE KANSAS FARMER.

In the dispersion sale of the H. R. Little herd of Shorthorn cattle at Hope, Kansas, April 26, 1906, will be the opportunity of the season to secure either heifers sired by or cows bred to the great bull, the Rustler, one of the best bred and best breeding bulls ever placed at the head of a Western herd. He is one of Robbins' breeding out of the dam of Ruberta and by the Lad For Me and the calves and yearlings in the sale of offering are typical show animals proving him worthy of his great ancestry and bespeaking for him a new home in another of the best herds of the West. In the young animals of his get are those of either sex, that our readers who are looking for material to strengthen their show herds should look after. Send for catalogue at once and kindly mention THE KANSAS FARMER.

In this issue on another page is the announcement of an important combination sale of choice Hereford cattle, at Superior, Neb., on Wednesday, April 18, 1906. It is made up from a choice selection of forty head of which one-half is young serviceable bulls. The cows and heifers old enough to breed will be safe in calf, or have calf at side. The sale is made up from consignments from such well-known herds as W. N. Rogers, McCook, Hatfield and Son, McCook, Neb., P. M. Morse, Beaver City, Neb., W. R. Wonderly, Invale, Neb., and R. N. Lewis, Bladen, Neb. There are no better whiteface cattle in the West than is found in these old established herds and those desiring to add new blood to their herds, will have a good opportunity to get it at this sale. There will also be show cattle and herd-headers for those desiring that kind of stock. The breeding is given in the sale catalogue, which will be sent on application to W. N. Rogers, McCook, Neb., under whose management the sale is conducted.

A Modern Commercial Marvel.

In 1895, when its founders laid the foundation upon which has since been erected the Seers, Roebuck & Company towering structure of business, believed the time opportune to go to the purchasing public of America with a proposition to supply them with the best the world's markets afford at a price which did not represent a series of profits to innumerable middlemen. They believed that the public could be well served by an institution which would bring to them the product of field and factory at a price so low that it represented but the bare cost of production, plus one small percentage of profit. This meant the elimination of the jobber, the wholesaler, the traveling salesman, the general and special agents—these cumbersome and expensive adjuncts to business which make it necessary for the consumer to pay, in most cases double the first cost of the merchandise he uses.



On this foundation of right prices has been built a superstructure into which was placed much material that is new. They sought to find the best merchandise that the markets of the world afford, and finding it, then endeavored to place it within the reach of every individual. They also taught the business world and incidentally the buying public, that the old hackneyed phrase, "Satisfaction or your money back," is not a meaningless phrase when incorporated in their literature, but that it is a sincere declaration, and that the customer can do them no greater favor than to return that which is unsatisfactory, and permit the firm to return his money and reimburse him for such expenses as have been involved in the transaction.

These fundamental principles won for Sears, Roebuck & Co. instantaneous recognition, and the growth of the business has been one of the wonders of the commercial world. The first quarters were quickly outgrown, larger quarters soon became inadequate, and since 1895 they have been moving about from place to place as the exigencies of business compelled them to seek larger quarters and better facilities for handling the business which came to them. Finally, they purchased a large building in downtown Chicago, but it was soon necessary to duplicate the structure. Still they grew, and they began leasing adjacent buildings until the business had spread to a number of the largest buildings and warehouses in Chicago. Early in 1904 they realized that this institution was growing more rapidly than they could care for it and that an entirely new plant, with every modern facility that science could devise must be provided. In the

center of a populous residence district on the west side of Chicago they acquired forty acres of ground, and on December 31, 1904, began the erection of the largest commercial institution in the world.

To provide an adequate merchandise building it was found necessary to build a structure so large that they were compelled to ask the City Council of Chicago to close certain streets so that they might build over them. This privilege was promptly accorded. They found that no such shipping room as was necessary to take care of the enormous and rapidly expanding business had ever been provided for any commercial institution. In length, breadth, and height this merchandise building would be so large that the method of conveying merchandise to the several departments, and in turn getting the several items comprising a customer's order from the several floors to the shipping room, involved difficult problems which had never before been solved. Then, too, it was found no inconsiderable difficulty to prosecute the work of construction on this enormous plant and to move from the numerous buildings downtown without interruption of business, without bringing disappointment to customers. This has all been accomplished in less than a year's time.

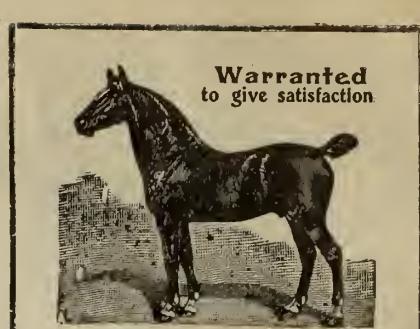
The first shovelful of dirt was thrown on the December 3, 1904, and the first department moved into its new quarters on September 1, 1905, just eight months later.

The problem of what would give the proper foundations proved a most perplexing one, as it was found to be over 60 feet to rock. Finally, it was decided to use concrete caissons, and under the walls of the Merchandise Building they have 1,506 caissons, 4 feet or more in diameter, and from 20 to 60 feet deep. In building these caissons 65,000 cubic yards of concrete were used. In all the buildings, which are of brick and terra cotta construction, they consumed 28,000,000 brick, 25,000 barrels of lime, 130,000 barrels of cement, 15,000,000 feet of lumber and 12,800,000 pounds of steel and iron. The merchandise building alone, which is almost a quarter of a mile long, a block wide, and nine stories high, is equivalent to 308 ordinary large store buildings.

An index to the building feats accomplished in the erection of this plant may be gathered from the fact that Annex "A" of the Merchandise building, erected on an area of 79,450 square feet was completed in 30 days. Here are some further figures that will doubtless prove very interesting. The entire plant is heated from a central station, and they used, in installing the heating apparatus, 100 miles of pipe; to convey the electric current for lighting the plant and operating its machinery 4,400 miles of copper wire, weighing 400,000 pounds, were used; for the distribution of filtered heated air in the winter time, and filtered cool air in the summer, 10 miles of sheet metal pipe.

The buildings are five in number, each designed for a special purpose.

This necessarily brief and fragmentary description of the several buildings comprising this new merchandising establishment will give some idea of the immense proportions to which this institution has grown in a period of 11 years, and it will also indicate what they have accomplished in the way of building and equipping a giant mercantile establishment in one year's time. It is a splendid monument to the sagacity of the American people, to



GOMBALT'S CAUSTIC BALSAM

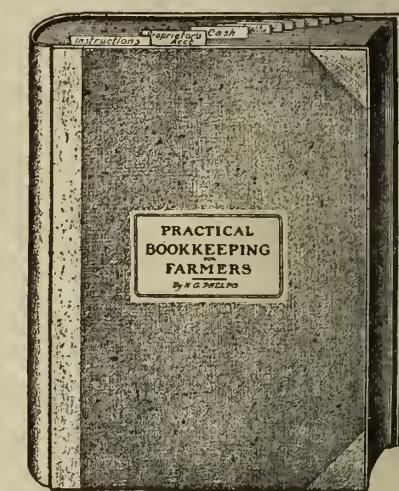
A safe, speedy and positive cure for

Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio



The farmer's guide to success in farming, 200 pages 10x13 inches. 20 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of a whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$2.00 delivered. Descriptive circular and testimonials free.

Send us ten 2-cent stamps and we will mail you our latest book—a 50-page book on Business Writing and Lettering; or we will send you both books for \$2.15, regular price \$4.00.

Address H. G. Phelps & Co., Bozeman, Mont.

Land of Plenty

Let me locate you on Goverment Land...

MEMBER



Can locate you on choice quarters of Government land. Many desirable bargains in patented farm and ranch lands. Write me at once for complete information concerning lands that are rapidly increasing in value.

Howard Gamble

Sheridan Lake, Colorado

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4¢ for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

ANYONE WISHING
UNITARIAN SERMONS and PUBLICATIONS
SENT FREE, may address Mrs. F. O. Leland,
Concord, Mass.

ings need coating every year. The best thing to do with these roofs is to rip them off altogether and lay Amatite. This roofing needs no coating at all, whether it be new or old. After it is laid (and that is an easy job), you need never to think about your roof for years to come. Amatite samples can be secured for examination free by addressing the Barrett Manufacturing Company, New York, Chicago, Cleveland, Boston, Allegheny, St. Louis, Minneapolis, Philadelphia, New Orleans, Kansas City.

About Oregon.

The remarkable growth of the great State of Oregon is well indicated by the increase in the yearly production of the fruits, grains, and grasses, and other agricultural products for which this State is so justly noted.

Oregon possesses some of the richest and most productive, and cheapest lands in the Union and it is indeed, "a land of promise" for those desiring homes in a country of almost perpetual spring and where land is sold within the means of every homeseeker desiring to acquire a competence.

The great attractions of this State are amply set forth in a beautiful and well-prepared booklet of 88 pages, entitled, "Oregon, Washington, and Idaho and Their Resources," which is sent out by General Passenger Agent A. L. Craig, to all inquirers interested in the resources of this great State. The beautiful illustrations in this booklet and explicit statements of profits made by farmers along the lines of the Oregon Railroad and Navigation Co., and the general subject matter thereof will be of deepest interest to every one contemplating making their homes in the mild climate of the Pacific Northwest.

The splendid wheat-producing country of the Palouse region, Washington, and the Walla Walla, Pendleton, and Umatilla sections of the State of Oregon, and the apple, orange, and peach lands of the Hood River Valley all receive a detailed description in this booklet. This book is sent out free, it only being necessary to enclose four cents in stamps to help pay the postage. We recommend every one reading this article to send for this publication without delay.

Those of our readers who are interested in pure-bred poultry will be glad to receive the fourth annual poultry catalogue of E. E. Vannatta, Vandalia, Mo. Such an interesting booklet helps to promote and increase the sales of pure-bred birds and Mr. Vannatta is to be commended for his enterprise in this respect.

A California trip is made doubly pleasant if it includes a daylight ride over the Rockies. This is the way of the Colorado Midland. Colonists' rates in effect daily February 15 to April 7. For full information write Morell Law, traveling passenger agent, 566 Sheldene Bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

Very Low Rates Tuesdays.

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

Powderpaint in 1906.

The painting season will soon be on. There will be lots of repainting of old buildings in addition to the new ones that will be erected. Any suggestions as to where good paint may be had at a reduced price will be timely. The argument for Powderpaint set forth in another column is deserving of consideration. This is a paint without oil, a compound prepared by A. L. Rice, of Adams, N. Y., which is giving very general satisfaction. The first great claim in favor of Powderpaint is that it is so much cheaper than oil-paints. It comes in powder form and requires only to be stirred in cold water, saving as much as three-fourths of the cost. In appearance and in lasting qualities it is claimed to be not inferior to oil-paints. It is said to be even better in many cases owing to the counterfeiting and impositions practiced in mixing many oil-paints. Powderpaint has the same sort of "set" that Portland Cement has. It forms a sort of enamel coating which does not crack or powder and which is weather proof, a resistor of colds and gases and to a remarkable extent of even fire. Certainly no more pleasing effect can be produced with the high-priced oil-paints than with this new painting material. It is having a large sale for farm-buildings, both outside and inside, barns, poultry-houses, and sheep-houses, etc. All particulars may be had by writing directly to Mr. Rice, North street, Adams, N. Y., for the little book on his new painting process, which he will send free of charge.

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railway. This engraving is 26 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheldene Bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

To those seeking homes, no better inducement is offered than in Jewell County, Kansas. It is one of the leading counties in the State, and statistics

THE WAY TO GET READY FOR HARVEST

If you grow grain or grass of any kind, you are invited to call on any dealer who sells one of the *International Line of Harvesting and Haying Machines* and get one of the new 1906 catalogs. You will find it well worth your while, for it's full of good grain sense—harvesting talk that means *bigger profits* for you.

While you are there, take a few minutes and look at one of the harvesting machines itself.

You will find that it comes up in every way to what your ideal of a *good* harvesting machine ought to be.

It is *convenient*—easy on you and easy on your horses—because it embodies every labor-saving, draft-reducing device that the most expert mechanical skill of the past 50 years has produced.

It has *large capacity*. There is no wasted energy about it. It allows you to do the work of harvesting "in a hurry."

It is *dependable* because it is made right. The materials used in it—the steel, iron and lumber—are the products of the manufacturer's own mines and mills and are right in every particular. There is no "guess work" about them. They are tested before used.

It is an *economical* machine because it saves all your grain; it saves time; it saves labor; it saves repair bills; it saves worry and trouble.

If a machine is *right* in its design, *right* in the materials used in its construction, *right* in its workmanship—it comes pretty nearly meeting every requirement you can make of it.

Convenient—trustworthy—economical. What more can you ask of a harvesting machine?

This question of harvesting means much to you. A half day's delay may make the difference between profit and loss on your crop.

The grain a poor machine or a worn-out machine *wastes*, is just so much from your profit.

It's too late now to reduce the *cost* of growing the crop—too late to *increase* the yield—your only chance is to get it *all* in the harvesting and to get it at the least expense of time and money.

If you grow grain, you need a *good* harvester.

If you grow hay, you need good haying machines.

It is economy to get the *best* you can find. International dealers have them.

Champion	Milwaukee
Deering	Osborne
McCormick	Plano

Go to the dealer and see for yourself.

If you don't know him, write to us for his name and address.

International Harvester Company of America, Chicago

(Incorporated)

INTERNATIONAL LINE.

Binders, Reapers, Headers, Header-Binders, Corn-Binders, Corn-Shoakers, Corn-Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Balers, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons and Binder Twine.

Remember:

There's a good old proverb about the impossibility of making a silk purse from a sow's ear.

It is equally impossible to make a good machine from *poor* materials—or unsuitable materials.

And likewise impossible to make a good machine even from *good* materials, without proper skill and proper facilities.

Every farmer knows how much harder it is today to get good lumber than it was 20 years ago.

Every manufacturer knows how difficult it is to get other materials of exactly the right kind at exactly the right time.

It was to overcome these difficulties that the several manufacturers of the various machines comprising the International Line, co-operated with each other in producing their own raw materials.

They cut and saw their own lumber, in their own

forests; they dry it in their own kilns, and they have it ready when they need it.

They mine their own iron and coal; they make their own coke and steel, and they produce much of the other materials used in their factories.

The result is that they do not have to try "to make a silk purse from a sow's ear." They have the *proper materials* at hand, when they need them.

Nor is that all. The International Line of machines for harvesting and haying embrace only machines which have stood the test of time and bear the stamp of approval of the American farmer.

Consequently there is always a good demand for them, and this demand makes possible the employment, in their manufacture, of the most expert workmen and the best facilities that the mechanical genius of the world has produced.

It is these things that make the International machines so satisfactory to the user.

show that land is lower in that country than in any other when we compare the soil and farming conditions with those of other countries. Prices of land range from \$25 to \$30 per acre, which if in other countries, would command 50 per cent more. If you desire to buy a good home it would pay you to write Morris & Woolsey, of Randall, Kans., who handle Jewell County farms and they will answer any inquiries. Mention the KANSAS FARMER and ask for a list of land which they have for sale.

Barbed Wire Fences.

The man who uses ordinary soap for shaving will soon find out how a horse feels when he gets mixed up with a barbed-wire fence. You can buy a new horse but you can not buy a new face, no matter how irritated or blotchy it gets or how badly it itches. Avoid

laundry or toilet soap for shaving, as you would a barbed-wire fence. Williams' Shaving Soap is made especially for shaving and in another column of this paper is an offer of a free trial sample if you write them and inclose a 2-cent stamp. "For the sake of your face, try it."

The annual sale of Glifford's Short-horn cattle is an event that is always looked forward to by the fraternity with considerable interest. The twenty-second annual sale will be held in the sale pavilion, at Manhattan, Kans., on April 26, 1906, and as usual the offering will be an attractive one, comprising 20 extra good red Scotch-topped bulls from 12 to 20 months old, all in

fine condition, the lot of Red Gauntlet 3d 147509, a Crickshank bull of exceptional quality. The female contingent comprises 20 of the best cows and helpers ever offered from the Glifford herd. All are bred to Scotch bulls, Senator Bruce 226244 and Cordelia's Knight 161501 (the best son of Red Knight). The herd bull, Cordelia's Knight, will also be included in this sale. He is sound and all right and a great breeder. For catalogue address F. M. Glifford, Wakefield, Kans.

Paper gloves and stockings are now made. When finished they closely resemble wool in appearance.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary
Kansas State Grange, to whom all correspondence
for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master..... N. J. Bachelder, Concord, N. H.
Lecturer..... Geo. W. F. Gaunt, Millville Hill, N. J.
Secretary ... C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... A. P. Reardon, McLoath
Lecturer..... Ole Hiltner, Olathe
Stewart..... R. C. Post, Spring Hill
Assistant Stewart..... Frank Wizwell Ochiltree
Chaplain..... Mrs. M. J. Ramey, Arkansas City
Treasurer..... Wm. Henry, Olathe
Secretary..... George Black, Olathe
Gatekeeper..... J. H. Smith, Lone Elm
Ceres..... Mrs. M. L. Allison, Lyndon
Pomona..... Mrs. S. M. Phinney, McLouth
Flora..... Mrs. S. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman..... Topeka, Station A
E. W. Westgate..... Manhattan
George Black, Secretary..... Olathe
Henry Rhodes..... Gardner
J. C. Lovett..... Bucyrus

STATE ORGANIZER.

W. B. Obryhim..... Overbrook

Production and Care of Home-Grown Seed.

READ BEFORE MANHATTAN GRANGE, NO. 748
BY J. W. HARTLEY.

It is not always practical and convenient for farmers to produce and care for the seeds used on their farms. But great benefit will be derived if they endeavor to produce and care for the principal seeds they expect to plant; those on which they rely the most for their support and income such as corn, wheat, oats, alfalfa, and a few others.

In this fertile land of ours we have neglected the production and care of seed, depending mostly upon the fertility of our land, favorable growing seasons, and the small amount of cultivation that we are wont to give our crops for our returns. It is only during the last few years that the farmer has begun to look seriously toward the kinds of seed that he is going to plant on his farm. Pedigreed seed or thoroughbred seed was not thought of by him then. Breeders of live stock are far ahead of the breeders of plants. We think sometimes, when we look upon a fine horse or a fine cow, that the breeders of live stock have reached the acme of perfection. But when we hear of an ear of corn being valued at \$100 and a pint of wheat of a certain variety being valued at \$50, we are forced to believe that the plant-breeders are making rapid strides toward perfecting their products and will soon be abreast of their friends, the stock-breeders, who have had hundreds of years the start.

We are now living in an age of plant improvement and perfection. Colleges, experiment stations, and the Government are showing and teaching the farmers the great benefits to be derived from the use of good seeds on their farms. They are showing them that seed that has been well-bred, well-grown, carefully selected, properly cured and tested for vitality is a tremendous factor in the production of a profitable yield.

The farmer has not always the fertility in his land that he would like to have. He can not always have the rains come and the sun to shine when his crops most need them, nor can he always cultivate when he should. Hence some forces of nature are beyond his reach. Consequently, it is to his advantage to direct those forces of nature that are placed under his power. And the "production and care of the seed" that he expects to plant is one of the forces of nature that he can turn to his advantage, and one which is a prime factor in the successful raising of good crops.

PRODUCTION OF SEED.

To tell the best methods of producing different kinds of seeds would be a task beyond my power and an impediment to your present happiness. But in producing seed we must remember that the seed we obtain contains certain characteristics derived from two parent plants—the mother plant from which the seed is obtained and the father plant which furnishes the pollen. Of course, in the plant world the same plant can and often does perform the functions of both sexes, but by experiments it has been found that where cross-fertilization is employed, the seed resulting therefrom is of greater vitality and produces a better progeny than does the seed from self-fertilized plants. But the physical characteristics of most of our farm plants, having as they do, the reproductive organs so complicated and so intricate make it impracticable for the farmer

to get seed from plants that have been cross-fertilized. Consequently, he has to look for his ideal characteristics in the mother plant from which he selects his seed. This is where the breeder of live stock has the advantage over the breeder of plants. But in a plant like our Indian corn the farmer can get seed from plants that have been cross-fertilized, and it will pay any farmer to have a seed-patch of corn where he can select seed from plants so treated. Send for a bushel of thoroughbred seed-corn. Get it as near your home as possible, as corn that will yield well at a distance might not yield well on your farm. Corn must become acclimated or accustomed to its environments before it will do its proper duty in returning wealth to its owner. Select from this bushel twenty of the best ears. Next number the ears, one, two, three, etc., in order of their proximity to the ideal. Do not plant kernels from the tips of the ears as they do not produce well. Make twenty rows and plant one ear in each row. Have your seed-patch some distance away from any other variety of corn. Cultivate well; shallow cultivation is the best. Just before the tassels are ready to distribute their pollen, go through the patch and cut off all the tassels on the inferior plants in the even rows. This will leave the best plants in the even rows to fertilize the silks on the plants in the odd rows. From these odd rows select your seed for your next year's crop.

SELECTION OF SEEDS.

The farmer should always select his seed when he has the most seed to select from. This of course will be in the fall of the year. Do not wait until your bins are nearly empty for if you do the cows, pigs, chickens, or something else will have devoured some of your choicest seed, and thus lowered the quantity as well as the quality of your next year's crop. Have ideals of each variety in your mind and select such seed as approaches in likeness these ideals. If this method is followed year after year, our crops will not grow less. I have heard farmers say that they must make a change in their seed as they have been growing the same varieties for years on the same land. They claim that such methods will cause the land to "run out" or fail to produce well. Such is not the case. It is the lack of attention to seed-selection that has caused the deterioration and not the continued growing of the same varieties on their farms. If proper care is taken in the selection of seed, farmers need never change their seed. If they do change their seeds, let them be sure and secure it from one that gives yearly attention to the principles of proper seed-selection.

CARE OF SEEDS.

After the seeds have been properly grown and selected, another very important part is to preserve their vitality. Within each seed is a tiny bit of life waiting for proper conditions and surroundings to make it a full-grown plant bearing the golden harvest for the farmer. By a little injudicious care of our seeds during the winter, we can weaken or destroy that little bit of life stored up in them so as to greatly reduce our crops. The object, then, in the care of seed is to preserve the vitality of life-force stored up in each grain of seed so that when it is placed in the ground in the spring this bit of life will bound forth with great strength and rapidity, able to battle with the unfavorable conditions that are likely to overtake it, and thus yield to its preserver a bountiful crop.

To preserve, then, the vitality and strength of each embryo plant stored away in each seed is to keep each seed dry and away from extremes of heat and cold. Any means that secures a thorough drying of seed soon after it ripens and keeps it dry until the seed is planted will be a success. After the seeds have been dried in the fall, place them in such a manner that a free circulation of dry air can get to them. Do not place seeds where there is a great excess of moisture. The seeds absorb moisture and this weakens their vitality and also greatly reduces their power to withstand freezing weather. Freezing weather will not damage seeds much if they are perfectly dry. Do not place your seeds in a loft over stock as the moisture from the animals will be absorbed by the seed. Seed-corn should be left in ear-form until time to plant. Place the ears so they will not touch each other in a pigeon-box arrangement so that air can reach all the ears. Place seed-potatoes on slats a few feet from the ground and not too many in a place. If left on the ground, they absorb moisture and put forth sprouts which reduces their vitality.



AND AMATITE SPELLS SATISFACTION

If you want a ready roofing that will last for years without painting or coating, buy Amatite. If, on the other hand, you want something that will "do" for a time Amatite won't interest you. It is too good. It will last too long for a man who wants a temporary roofing.

Amatite is made to wear.

It is strong, tough, and durable with a protective mineral surface such as no other Ready Roofing can offer.

Its strength lies in the toughness of the materials which go into its make-up—real wool-felt and coal tar pitch—the best water resisting materials known.

Pitch is used in water-proofing all the big buildings, tunnels and subways throughout the country. Recently the old New York Central tunnel was uncovered and some pitch which had been in use for over thirty years was unearthed and the engineers in charge of the work found it just as

pliable and water resisting as the day it was put in.

When you buy Amatite you are sure of getting a roof that will keep out the water—Pitch is absolutely impervious to water.

We are so sure of the superiority of Amatite over any other ready roofing that we are anxious that you should see a sample which you can submit to any test you like. We are certain that Amatite will give better service for a longer period, at less cost, than any other ready roofing made.

You may not be in need of a new roof at the present time, but we would like to have you know about Amatite, so that you will not need to investigate the roofing question when the need of a new roof arrives. Write to-day for the free sample to the Barrett Manufacturing Co., at New York, Chicago, Cleveland, Boston, Allegheny, St. Louis, Minneapolis, Philadelphia, New Orleans, or Kansas Kansas City.

RAILROADS IN CONTEST OVER EXCURSION RATES.

Three Groups of Lines at War as Result of Homeseekers' Rates to Different Sections of the Country.

The three groups of railroads representing the Northwest, the Southeast, and the Southwest are engaged in a three-cornered war over homeseekers' excursions.

Fuel was added to the flames yesterday by a proposition which the Rock Island submitted to make homeseekers' rates effective to the Southwest territory every Tuesday in the month. If the plan is negatived by the Western Passenger Association lines, independent action will be taken by the Rock Island. John Sebastian, speaking for the latter road yesterday, said:

"The Rock Island and Frisco systems stand flatly for the development of the Southwest, into which territory a heavy immigration has been induced by spending a large amount of money and by liberality which has had immense results in the way of colonizing. We believe the location of settlers is vastly more important than the loss of a few dollars through the manipulation of cheap rate tickets. The lines I represent have no objection to any basis of homeseekers' rates which may be inaugurated into other territories, but so far as the Southwest is concerned we shall insist upon protecting that territory by as liberal inducements as are offered by the lines in any other territory."

TROUBLE OF LONG STANDING.

The trouble which has grown serious, had its origin several years ago when the Rock Island and other lines began to make low rates in the interest of developing the Southwest. For years the Western roads had accepted tenders of low rates made by the Southeastern roads with a view to colonizing the South and Southeast. When the Western lines tendered low rates in the interest of their territory, the Southeastern roads demurred and have ever since been calling for a conference.

Such a conference was held in St. Louis last week, at which the Southeastern interests asked the Southwest roads to take out their low rates, applying from Memphis territory. Objection was especially made to the round-trip rate of 75 per cent of the one-way fare which is put into effect during the fall months. All roads except the Rock Island expressed a willingness to raise the rates.

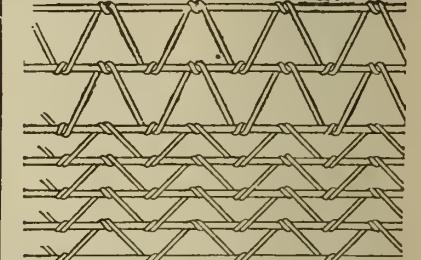
In the meantime the Northwestern lines had given notice that they would run homeseekers' excursions every Tuesday in the month instead of every third Tuesday, and the Rock Island declared it would not permit the Southwest to be sidetracked for any other territory. It is rumored the Rock Island's next move will be to extend its cheap rates to the Birmingham territory, which it has refrained from doing hitherto in consideration of the Southeastern situation.—Chicago Record-Herald.

Second thoughts, they say, are best. —Dryden.

Scandalous gossip is destroying the masses.

THE FIRST

Hartman Stockade Woven Wire Fence



Ever built was erected 17 years ago and is still in use as durable and strong as when first put up. The Hartman is a perfectly woven wire fence that is strong enough to keep in the maddest bull and fine enough to keep out the chickens. It is made of the best quality galvanized steel wire and contains much more material than fences more cheaply constructed. That's why it lasts so long. If your dealer doesn't handle it, write for catalogue and prices. Address

GLEN MFG. CO., 145 MILL ST., ELLWOOD CITY, PA.

Also Mfrs. Hartman Steel Pleated Fence, Hartman Flexible Wire Mats and Glen Steel Mat.

Two Years Test



You don't want to make a mistake when you buy a buggy. We arrange matters so you can be sure you are right. We have our own factory and make what we sell. We will ship you this buggy or any other vehicle you may select from our catalog on

30 Days Free Trial Freight Prepaid

Then if you can find any flaw in it within two years we will replace it free and make you satisfied. Are we fair? We couldn't do this if we were selling other people's goods. And we couldn't do it unless our own were of highest quality. Don't forget, our prices are just about half dealers' prices. Send for catalog showing all styles, and see for yourself. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

More Money Made as Local Agent FOR FARMERS FIVE YEAR ACCOUNT-BOOKS

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N.Y.

AGENTS WANTED Sell \$1 bottle Sarasa parilla for 50¢. best seller; 100 per cent profit. Write today for terms. F. R. Green, 118 Lake St., Chicago.

Miscellany

Two Kinds of Click-Beetles and Their Wire-Worms.

ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

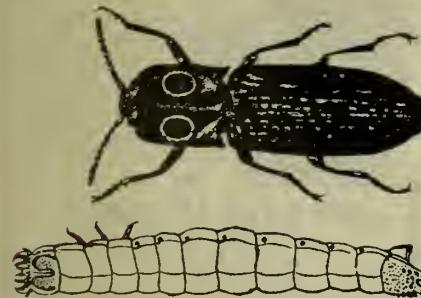
A specimen of the Eyed Elater, (*Alaus oculatus*, Linnaeus), was received with each of the following letters, both of which are brief, yet indicative of the curiosity with which this species of insect is generally regarded. The localities and dates as given add to our knowledge of its appearance in Kansas in a most definite manner.

"I send you to-day a creature the like of which I never saw before." Lola, Kansas, May 25, 1905.

The second letter was addressed to Professor F. H. Snow:

"I mail you a peculiar bug which I found on my water bucket. I have never seen any like it before. Can you inform me what it is—the common name, I mean—and what it lives on? It is of such a peculiar shape and its big eyes make it look so mournful. I feel quite interested." Arkansas City, Kansas, July 15, 1905.

This insect is one of the clicking-, snapping- or spring-beetles which are classed in a family called Elatridæs. More than 500 kinds of these beetles are known in the United States alone.



Eyed Elater (*Alaus oculatus*, Lin.) and larva, (Natural size.) After Harris.

Many of them are familiar to most people and especially to boys under the name of "skip-jacks," though their larvae are better known as "wire-worms." The adult Eyed Elater derives its name, both common and scientific, from two large eye-like spots on its thorax. The place for the real eyes, however, is on each side of the head as with other insects.

To the person who beholds the insect for the first time, its unusual form together with the ornamental eye-like spots are apt to induce startling as well as mistaken impressions regarding it. Its structure is also remarkable by reason of the stout curved prong extending backward on the under side between the joints of the thorax, and with which the insect is enabled to snap itself violently. Still in this respect, it is like all the other members of its family.

It is not often found, but is well known to entomologists. In fact, many kinds of common insects are liable to be considered as strange if not rare creatures by persons who have never seen or known of such before. I can distinctly remember finding my first specimen of this kind of beetle, when, as a boy living in Pennsylvania, I had just begun to collect insects. My astonishment on beholding it was somewhat mingled with fear, but I finally mustered up enough courage to capture it, and it was esteemed as a prize for many years.

I am not aware that this insect has been found farther west than in Texas, Kansas, and Minnesota. The University collection contains Kansas specimens from Neosho as well as Douglas County, myself having taken it here in Lawrence, in June. In the first list of Kansas Coleoptera, furnished by Professor E. A. Poponoe in 1876 and printed in volume 5 of the Kansas Academy of Science, this species was reported as occurring in "Eastern and Middle Kansas."

All that need be said further about this insect is comprised in a popular account written by the eminent authority, William Saunders, in his work on "Insects Injurious to Fruits," from which the figures and description given herewith are borrowed with kind permission of the publishers, J. B. Lippincott Co., of Philadelphia, Pa.

"This is the largest of our Elaters, or spring-beetles, and is found with its larva in the decaying wood of old apple-trees. The beetle (see figure), is an inch and a half or more in length, of a black color sprinkled with numerous whitish dots. The thorax is about one-third the length of the body, and

is powdered with whitish atoms or scales; the wing-cases are ridged with longitudinal lines, and the under side of the body and legs thickly powdered with white. It is found in the perfect state in June and July.

"The mature larva (see figure), which attains its full growth early in April, is about two and a half inches long, nearly four-tenths of an inch across about the middle, tapering slightly towards each extremity. The head is broad, brownish, and rough above; the jaws very strong, curved, and pointed; the terminal segment of the body blackish, roughened with small pointed tubercles, with a deep semicircular notch at the end, and armed at the sides with small teeth, the two hindermost of which are long, forked, and curved upwards like hooks; under this hinder segment is a large fleshy foot, furnished behind with little claws, and around the sides with short spines; it has six true legs—a pair under each of the first three segments. Early in spring the larva casts its skin and becomes a pupa, and in due time there emerges from it a perfect beetle.

"This beetle, when placed upon its back on a flat surface, has the power of springing suddenly into the air, and, while moving, turns its body, thus recovering its natural position. This unusual movement combines with its curious prominent eye-like spots to make it a constant source of wonder and interest. Since it feeds mainly on decaying wood, it scarcely deserves to be classed with destructive insects; yet, being occasionally found in the trunk of the apple-tree, it is worthy of mention here."

Much of the success of fruit-culture depends upon effective contest with insect pests wherever fruit is grown. The enforcement of proper remedial treatment against the greater number of the various kinds of injurious insects has become an established practice towards insuring most profitable yields, either of fruit or other crops. Prompt action is sometimes necessary to save fruit-trees or other fruit-bearing plants from sudden outbreaks of a destructive foe, while at any time, the interests of the fruit-grower require that he should know about the important enemies liable to be encountered, and also the practical methods for their control when possible. The importance of having reliable information at hand as a guide to direct one in recognition of an enemy and what to do to suppress it is readily perceived. Such a guide may prove of incalculable value to a person in need, particularly in times of emergencies. Erroneous advice if followed is most costly than absolute neglect, for, not only is labor then lost, but needless expense incurred.

Mr. Saunders wrote his book, "Insects Injurious to Fruits," after an experience of over twenty years as a fruit-grower in connection with his entomological work, all of which shows how well qualified he was to produce a work that has long held an enviable reputation for standard authority, and the second edition, lately offered, indicates that it is meeting with widely extended sales. The plan of the book consists in treating of the important pests of each kind of fruit under separate headings, according to what they attack and whether injuring the fruit itself, or the roots, body, leaves, buds, or flowers of the plant. Facility is thus afforded to a person, unacquainted with the name or classification of an insect pest, to find reference to it by merely knowing its habits. For instance, when the fruit-grower wants to learn about a certain pest, he turns to those pages of the book which are devoted to a discussion of the enemies of the particular fruit or its plant that is attacked, and therefore him are the figures and descriptions that enable him to identify his specimens in ordinary cases with ease. With this much gained, the desired information is assured. The entire work covers 266 subjects and is illustrated with 440 excellent woodcuts which represent natural enemies—the beneficial insects—together with various stages of the injurious hosts, thereby rendering a very valuable aid towards a more intelligent understanding of the reading matter.

(This book can be ordered through THE KANSAS FARMER. Price, \$2.00.

The fact has been brought out that such trees as afford suitable breeding places for the Eyed Elater are those having rotten portions in which the worms live, consequently, healthy trees would not be subject to its invasions. Actual damage from wire-worms, then, is caused by other kinds which injure crop plants. The following account of one of the more common kinds is here reproduced from a University leaf-

let, copies of which were formerly prepared for distribution by Professor V. L. Kellogg:

THE COMMON WIRE-WORM OR CLICK-BEETLE.
(*Melanotus communis* Gyll.; Order, Coleoptera).

Diagnosis.—A long, slender grub of yellowish-white or light-brown color and unusually hard body, feeding on the roots of cereal and garden plants.

Description and Life-history.—The worms or larvae vary much in size, being, when full grown, from four-fifths of an inch to an inch and a quarter in length. They are sub-cylindrical in form, nearly smooth, shining, and with the head, thoracic, and last segments considerably darker than the rest of the body. The duration of the larval stage is at least three years. The change from larva to pupa usually occurs in July, and the adult beetle issues about one month after pupation. The adult, which is one of the click- or snapping-beetles, is rather slender, dark brown, glossy, and is about one-half an inch long. The body is clothed with fine, short, grayish hairs. The eggs are probably laid in the spring or summer, but the exact time of egg-laying is not known.

Remedies.—For this species and other species of wire-worms no practical remedy against the larva is known. The attention must be given to the adult insects, the beetles. These may be trapped in large numbers on baits of poisoned clover or of poisoned, sweetened corn-meal dough. A handful of freshly-cut clover may be dipped into a mixture of water and Paris green and placed on the ground where the beetles abound. The clover should be covered with a small board to prevent drying. The dough is made by mixing one part of sugar with ten parts of corn-meal, and sufficient Paris green to make a dough.

Fall plowing is excellent for killing the adult beetles which have not yet come from the little earthen cases made by the larva just before pupation.

Quick Carriage Painting.

The following is from a lady: "We have a general-purpose carriage which can not be idle long enough for regular carriage painting, and still it is in need of paint. What can I put on that will dry and harden quickly, and still protect for a time? How will linseed oil, boiled or unboiled, do with coloring matter, or will it require white lead. And can we use the same paint on wood-work and on iron?" For regular painting a coat of lead and oil should be put on first, with a little color in it. Then if you wanted a black finish, a coat of good black paint should be used. But black does not wear long unless covered. There is no body to lamp black. So one or more coats of varnish are put over the black.

This varnish dries hard and will wear, if it is of good quality. Lead and oil, colored, will not wear like varnish, and it will not dry quickly and hard enough for your purpose. At any rate you can do better. Buy some good carriage paint, ground in No. 1 coach varnish, of the color you desire. It comes in cans of various sizes, pints, quarts, etc., and any color you wish. Perhaps a quart will be enough to put one good heavy coat on your carriage. But I do not know just how much wood-work there may be on it. This paint will have a body to it and varnish in it instead of oil. It will dry quicker and harder and look and wear better than oil-paint would. Get a fine varnish brush to put it on with. The temperature of air, carriage, and varnish should not be less than 75 degrees for some hours before you do the painting. It will be better if it is 80 degrees, or more. The paint will go on easier and you can do a better job. You will need to work fast and use some care to prevent streaks and running. A coat of first-class paint of this kind will wear quite a while and the carriage can be used in a day or two, if necessary. Wash it in cold water before using. Avoid dust and mud at first as much as you can. If you get any on rinse off promptly with cold water, but don't rub it. With a little care at first your carriage will look quite well for some time. If you can not get chose paint of the color you desire, and ground in No. 1 varnish of your dealer, Montgomery Ward & Co., Chicago, will send it to you for about 50 cents a quart. A good prepared paint of this kind, mixed by machinery by experts, will do better than you can make from varnish, lead, and color—T. B. Terry in Practical Farmer

A man of pleasure is a man of pains. Young.

Thoroughness is mastered by few.

PAINS

AMERICAN WOMEN FIND RELIEF

The Case of Miss Irene Crosby Is One of Thousands of Cures made by Lydia E. Pinkham's Vegetable Compound.

How many women realize that it is not the plan of nature that women should suffer so severely.



Miss Irene Crosby

Thousands of American women, however, have found relief from all monthly suffering by taking Lydia E. Pinkham's Vegetable Compound, as it is the most thorough female regulator known to medical science. It cures the condition which causes so much discomfort and robes these periods of their terrors.

Miss Irene Crosby, of 313 Charlton Street, East Savannah, Ga., writes:

"Lydia E. Pinkham's Vegetable Compound is a true friend to woman. It has been of great benefit to me, curing me of irregular and painful periods when everything else had failed, and I gladly recommend it to other suffering women."

Women who are troubled with painful or irregular periods, backache, bloating (or flatulence), displacement of organs, inflammation or ulceration, that "bearing-down" feeling, dizziness, faintness, indigestion, nervous prostration or the blues, should take immediate action to ward off the serious consequences, and be restored to perfect health and strength by taking Lydia E. Pinkham's Vegetable Compound, and then write to Mrs. Pinkham, Lynn, Mass., for further free advice. She is daughter-in-law of Lydia E. Pinkham and for twenty-five years has been advising women free of charge. Thousands have been cured by so doing.

Every Heart-Ache

Every pain in the breast, difficult breathing, palpitation, fluttering or dizzy spell means that your heart is straining itself in its effort to keep in motion. This is dangerous.

Some sudden strain from over-exertion or excitement will completely exhaust the nerves, or rupture the walls or arteries of the heart, and it will stop.

Relieve this terrible strain at once with Dr. Miles' Heart Cure. It invigorates and strengthens the heart nerves and muscles, stimulates the heart action, and relieves the pain and misery.

Take no chances; make your heart strong and vigorous with Dr. Miles' Heart Cure.

"I suffered terribly with heart disease. I have been treated by different physicians for my trouble without results. I went to a physician in Memphis, who claimed that I had dropsy of the heart. He put the X-ray on me, and in connection with his medicine he came near making a finish of me. Some time before this a Mr. Young, of St. Louis, was in our town. He saw my condition, and recommended Dr. Miles' Heart Cure to me. I gave it little attention until my return from Memphis, when I concluded to try it, and am pleased to say three bottles cured me."

CHARLES GOODRICH,

Caruthersville, Mo.

Dr. Miles' Heart Cure is sold by your druggist, who will guarantee that the first bottle will benefit, if it fails he will refund your money.

Miles Medical Co., Elkhart, Ind.

Home Departments

CONDUCTED BY RUTH COWGILL.

Ministries.

The memory of a kindly word
For long gone by,
The fragrance of a fading flower
Sent lovingly;
The gleaming of a sudden smile
Or sudden tear;
The warmer pressure of the hand
The tone of cheer;
The hush that means, "I can not speak
But I have heard;"
The note that only bears a verse
From God's own Word—
Such tiny things we hardly count
As ministry,
The givers deeming they have shown
Scant sympathy;
But when the heart is overwrought,
Oh, who can tell
The power of such tiny things
To make it well.

Amos R. Wells.

Training for Domestic Life.

M. W.

With other innovations of modern times, the care of the household and other domestic problems have taken on a dignity that has heretofore been lacking. This is evinced partly by the fact that the subject is worth discussing at all, and partly by the term under which all problems of this kind are classed. Until recently the subject has been so neglected that there was not even a name for it; but now the term "Household Economics" is frequently heard abroad in the land in one or another of its frequently discussed phases. Better still, "Domestic Science" seems a singularly appropriate and fitting term, classing it, as it does, with the other branches of knowledge which are plainly and indisputably worth studying.

THE SCIENCE OF MANY SCIENCES.

There is one striking difference, however, to be noticed. While each of the sciences has a special field for its operation, one who is versed in domestic science must have accurate and useful knowledge of many other branches. For under this head we consider all questions relating to the care and management of the household, the general atmosphere, home comfort, the decorations, the care of the family, the management of the help, and the cooking. To be thoroughly capable, therefore, of competing with the daily problems arising from these varied interests, it is evident that the ideal housekeeper should be thoroughly conversant with many subjects, for instance, the laws of chemistry, in preparing healthful foods; of physiology and hygiene, in sustaining health; of natural philosophy, in judging temperature and heat. Besides all this, the ideal housewife should have more graces of mind and character than are allotted to any other human being, to meet the trials and vexations so constantly arising to trouble her.

"LIGHT HOUSEHOLD TASKS."

Till within recent years, the system of household economy has been left to its own devices, to its own developments. There have been households and households since the beginning of time, but the management thereof has been left to the intuition or natural capabilities of the housewife, for good or ill, as the case might be. This subject was not considered worthy of the weighty discussion which was often lavished on trivial and, if we may suggest it, less important matters. On the one hand, the common fallacy, seemed to be that this was just woman's work, and therefore was simple and easy, requiring no brains or thought. Ignorance on this subject still prevails. How often we have come across the expression, "Light household tasks," which seems to be the poet's favorite delineation of a housewife's duties. The minds of the initiated travel back to their own experience therein, sweeping, dusting, baking, scrubbing, ironing, cooking—"light household tasks," forsooth!

HOUSEKEEPING NOT INSTINCT.

On the other hand, it was generally conceded that if a woman encountered difficulties in her work, her intuition would help her in any emergency. We are inclined to scoff at this idea, for woman would be a most remarkable creature if she were endowed by nature with the knowledge that she needs, which might include: How to cook an appetizing meal from which her lord and master will not contract dyspepsia; how to manage the fresh air and control the temperature so as not to give the babies cold; how to take care of unexpected company gracefully and graciously; in fact, how to run the house smoothly and keep victoriously

above all its petty vexations. Would not woman, indeed, be a most glorious creation if she knew these things instinctively? It is a fact, sad to relate, but alas! too true, that many women have no instinct whatever for home-making, but this seems in no wise to deter them from taking the responsibility of a household upon their shoulders whenever opportunity offers.

THE HOMEKEEPER'S RESPONSIBILITY.

Nineteenth and twentieth century reformers have found here a wide field for operation, and in spite of some opposition and some lack of interest great strides have been made in this comparatively new domain. It is generally understood that a great many evils in our land may be traced directly to badly-managed and poorly-kept homes. What of the poor working man who is attracted by the brightly-lighted saloon as he contrasts it with his own dingy home? What of the clerks who almost faint from exhaustion because of the lack of nutritious food? Think of the hundreds of men holding subordinate positions and doing inefficient work, perhaps for the very same reason. Think of the great mortality of infants and children, due very largely to the mothers' ignorance of the laws of health.

As to the importance of this subject, then, there are no two opinions. We agree that it is the foundation of our civilization, our happiness, and our business prosperity. When we consider the comforts of home, the relaxation from business cares, the training of the children, the food that we eat, can we measure what potent factors they are in shaping the tastes, the ambitions, and the career of each member of the family?

IMPORTANCE OF DOMESTIC TRAINING.

As for similar evils due to ignorance, the remedy has been found in education. Not education in the generally accepted sense only, but in addition the training that will fit this particular need. We would almost say "instead," rather than "in addition," if necessary. We should call it quite absurd for a young man intending to be a doctor to pass through the general college course in sciences and classics, and then put up his shingle and be ready to practice. His patients would perhaps be slow in trusting themselves to his care. A minister must not only have a general education, but he must know his own profession, not by intuition or natural capability, but through study and training. A man can not be a successful carpenter because he is well educated. He needs training and practice in his business before we would trust our houses to him. We would not give our dresses to a dressmaker with neither training nor experience. Nay, verily! Not even though she be a graduate of Vassar! But the lives of thousands of children and the welfare of hundreds of homes are entrusted to the management of women who have no aptitude for this vocation, no training whatever, and no knowledge except that which they gain slowly by bitter experience.

BEGIN WITH THE CHILDREN.

Since fully one-third of the women of our country marry, why should the training necessary for them in their life work be entirely neglected? A great step in advance has been made by the introduction of manual training into our public schools. As in the case of other innovations, this idea has gained ground slowly, partly, perhaps, from the fact that the school curriculum seemed already crowded. And indeed, with the children taking special lessons in drawing, paper cutting, bugs, and butterflies, clay modeling, water colors, beadwork, and raffia, where was the time, after a little had been given to reading and arithmetic and the other branches that used to be considered important, for work in sewing and lessons in tidiness and housekeeping?

But it has been decided that there are things more important for the average child to know than these interesting, but superfluous items, and that perhaps time spent in training eye and hand and brain in the lines of future usefulness may be of practical benefit. The experiment is at least worth trying. So the boys are learning to plan and draw and carve, and the girls are learning to sew and cook, and we wonder why this was not thought of long ago so that many generations of boys and girls might have had this training.

When using baking powder it is always economy to buy the Royal. Royal makes the finest, most wholesome and delicious food.

Who knows what might have been the improvement by this time in the homes of this land of ours?

And so, I say that women should not be willing to take up the duties which will come in home life, without some preparation. It is surely an important vocation, since the health and happiness of the whole family depend upon it. When our girls decide that they will not take the responsibility of a house and the cares of a family upon their shoulders without studying and being trained in household duties and the care of children, there will surely be much less discontent, greater comfort, and even better chances for health and prosperity for every member of the family.

Uses for Stale Bread.

New Boston Brown Bread.—Many a frugal New England housewife, who knows that to "waste not is to want not," never allows one bit of stale bread to be thrown away, and she is able to use many pieces in new Boston brown bread. Soak one and one-half cupfuls of stale bread in two cupfuls of cold water over night. In the morning run through a colander; add three-fourths of a cupful of molasses, one and one-half cupfuls each of rye-meal, granulated corn-meal, and Graham flour, mixed and sifted with three teaspoonfuls of soda, and one and one-half teaspoonfuls of salt, and one and one-fourth cupfuls of cold water. Stir until well mixed and steam in the same manner as Boston brown bread.

Bread Crumbs.—Cut bread in moderately thick slices; place in a pan in the oven and let stay until thoroughly dry (not brown). When crisp, remove from the oven and crush in an ordinary meat-grinder; place in glass jars and set away for use. These crumbs if thoroughly dried keep indefinitely. Bread-crumbs may replace cracker-crumb in almost every instance. They may be used for all scalloped dishes, for frying oysters, croquettes, etc., for use in soups instead of thickening, and if mixed with melted butter and browned may be used for garnishing vegetables and meats.

Fritters.—Stale bread, ground or soaked in milk, makes delicious fritters. Use milk enough to soften the bread in addition to two eggs beaten light and a little salt; then add enough flour to make it the right thickness to stick together, and fry in hot butter or other fat. Eat with syrup or beef or chicken gravy.

By an unfortunate transposition of the poetry quoted in Mrs. Kellogg's excellent paper on "The Right One" in last week's KANSAS FARMER, much of the beauty of the thought was obscured and she was made to appear to be an egotist whereas she is exactly the reverse, never overvaluing her own merits and always generous to others of whom she thinks, speaks, or writes. Those who have retained their KANSAS FARMER of March 29 should turn to page 348 and reread Mrs. Kellogg's paper reversing the positions of the quotations.

Natural history always interests children, who usually recall explanations of the phenomena in their own way. An account of the habits of the cuckoo, for instance, was apparently absorbed at the time, but was reproduced thus a few days later: "The cuckoo? Oh, that's the bird that doesn't lay its own eggs."

"A Kalamazoo Direct to You"

You save from 20% to 40% by buying a Kalamazoo Stove or Range direct from the factory at lowest factory prices. Moreover, you get a stove or range not excelled by any in the world. We guarantee quality under a \$20,000 bank bond.

We Ship On 360 DAYS APPROVAL and We Pay the Freight.

If you do not find the Kalamazoo exactly as represented, the trial does not cost you a cent. It will pay you to investigate.

Send Postal for Catalog No. 189.

All Kalamazos are shipped promptly, blacked, polished and ready for use.

Kalamazoo Stove Co., Mfrs., Kalamazoo, Mich.

All our cook stoves and ranges are fitted with patent oven thermometer which makes baking easy.



The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS

Direct from the Mills to You

BEACON-ITE LONG-LIFE ROOFING WE PAY THE FREIGHT

When you buy roofing you expect it to last, don't you? You don't want to be incessantly patching little leaks after every rain. Isn't this just what you are doing now? You have had some experience with tin and shingle roofing.

Are you satisfied with their lasting qualities? BEACON-ITE is a long wool fibre thoroughly saturated with a secret preparation that makes it absolutely water-tight.

It will not rot or rust. By buying direct from the mills and putting it on your self (we furnish all necessary nails and cement free), Beacon-ite is the most inexpensive roofing you can buy. If you want a roofing that will last and need no patching, write-to-day for FREE samples of BEACON-ITE.

BEACON-ITE MILLS, 1106 N. 2nd Street, St. Louis.

The Young Folks

Attractions of Our Early Homes.

My little birds with backs as brown As sand, and throats as white as frost. I've searched the summer up and down, And think the other birds have lost The times you sang so sweet, so low, About the old house, long ago.

My little flowers, that with your bloom So hid the grass you grew upon, A child's foot scarce had any room Between you—were you dead and gone? I've searched through fields and gardens rare, Nor found your likeness anywhere.

My little hearts, that beat so high With love to God, and trust in men, Oh come to me, and say if I But dream, or was I dreaming then, What time we sat within the glow Of the old house hearth, long ago?

My little hearts, so fond, so true, I searched the world all far and wide, And never found the like of you; God grant we meet the other side The darkness twixt us now that stands, In that new house not made with hands.

—Alice Carey.

Fleetfoot: The Autobiography of a Pony.
MARION SEWELL.

CHAPTER I.—LIVING AND LEARNING.

Somewhere out on the prairie my life began. It was in the spring time when old Earth was at her best, and, as with all young animals, the greater part of my days was spent in sleep, but during the intervals of wakefulness when I took the trouble to look about me, I was much pleased with what I saw and heard.

The soft grass and blooming flowers impressed me favorably, while the sweet music of singing birds and the unceasing murmur of a brook near by had a cheering and uplifting effect upon my mind.

Had I been older and wiser, it is likely that the satisfaction which I felt in the present would have been lessened by thoughts of the future. It is possible that across my mind's eye would have come a vision of a frozen brook and my mossy bed transformed into a bank of snow, and I could have foreseen myself confronted by emptiness and desolation.

Happily, then, for my peace of heart, I was entirely unaware of the existence of winter or of anything else that was not comfortable. Consequently, my only two ideas were that life was sweet and that it was always spring.

But alas! one can not dwell long in this world and remain ignorant of trouble. If we live we must learn; and surely I was young enough when I received my first lesson.

This eventful day was not as clear as usual; to put it plainly, a heavy fog had settled over the landscape and a drizzling rain sifted down from the darkened skies.

The flowers which had been the source of so much pleasure to me in my waking moments now appeared only as blurs in the tall grass, and I was unable to distinguish one color from another.

I had never before known my bird friends to be anything but artists in the way of song, but at that time they gave nervous little squeals and gasps, and eventually dropped into a drowsy silence.

The brook which I loved so well on account of its soft and soothing ways, I suppose, that it was called upon to relieve the situation, gradually worked itself up into an unpleasant roaring sound, thereby making matters worse than ever.

The moisture which was collecting upon my thin coat gave me a chilly feeling, but more than all other distasteful sensations combined, there came upon me suddenly the perception of a great loss and I felt very helpless as I staggered about on my wobbly legs.

The cold rain fell faster and faster, everything seeming each minute to grow less distinct, and a dull misery crept into my heart and took possession of me.

But I decided to try to make my way onward for it was only by moving about that I could hope to find my friend, the one who had taken such good care of me, but who was now lost somewhere in the thick fog.

What was that? The clatter of advancing hoofs! Now surely my friend is coming back to me and the chill will be taken out of my stiffening limbs by the warmth of her breath, and the soft, caressing whinny will tell me that I need not be afraid.

But no, they have passed by and left me far behind. Still I am resolved to keep on going and perhaps after a

while I may find light and with it will return the dream-like beauty of yesterday.

Yesterday! how long ago that seems! Surely it is ages since I have had anything to eat, since I have lain joyfully and contented in the warm sunshine.

But there! what a little stumbler I am; my feet turn under me at nearly every step. It is hard to make one's way in the dark; but I will be very careful and pretty soon I shall find the light.

Ah, there it is! but only for a moment; one great, white flash, and it is darker than ever. And that heavy, rumbling sound, filling up the place where the light ought to be; I never heard a noise like that before.

More lights far away and more rattling sounds so near that they frighten me. I am proving myself a coward, but I think it because everything is so strange and black.

Now, I am afraid to take another step forward; however, I need a rest, for my legs ache and ache and I am trembling all over. I wish the grass wasn't so wet so that I could lie down and sleep.

Did I fall? Well I will remain here a little while, but I know that I can not sleep, for I am so cold and so hungry, and oh, I am all alone.

CHAPTER II.—BIG JAKE.

I do not wish to go into details concerning the lack of knowledge which I possessed in the early months of my life, but will endeavor to give my readers the benefit of an advanced and hard-earned education.

I did not know the name of anything then and had but limited reasoning powers. Of course, all that is different now, and by looking back over past years I am pretty well able to tell what took place from the time when I awoke to the realities of life, that is to say, the two days and one night when I was lost, and wandered, panic-stricken, through a dense fog which later developed into one of the most severe thunderstorms of the season.

I am not sure how long I lay on the wet grass when I dropped down, a forlorn little heap, worn out by hunger and aimless wandering, but when I again opened my eyes a great change for the better had taken place.

The air was clear and there wasn't a cloud in view. The sun shone dazzlingly bright, and its heat was very good to feel after the long hours in which I had been chilled through and through.

I was a long distance from the brook and could not hear it now even when it roared, but the birds were more melodious than usual as they hopped about singing their sweetest; it must have been a song of thanksgiving in which they all united because the clouds had disappeared and the awful noises and strange flashing lights were gone, leaving a world just as it was before—full of peaceful beauty.

I was thankful also, but I had no heart for music, nor did I feel like gamboling about and showing my pleasure in a coltish way, for I was too hungry and lonely to display any signs of joy.

Raising myself and looking around, I could find but small encouragement in the miles and miles of green sward. Then suddenly out of the distance appeared multitude of heads, and in a few moments a large body of high-spirited horses came rushing in my direction. I hastily arose on all fours, filled with confusion and not a little dread, not knowing how I could escape being trampled by those flying feet.

Somehow they went past without even so much as touching me, and my knees bent under me with involuntary devotion as I looked after them, dazed and grateful. Then, to my surprise, I saw one of the herd, the very largest and apparently the leader, turn his head and come cantering slowly back.

The others, though they were going at their best speed, noticed the large horse's movement and wheeled about with the intention of accompanying him, but it was evident that he had no desire for their society just then, for he elevated his long neck and gave a ringing neigh in which even I, inexperienced though I was, caught a note of warning.

After a moment's hesitation his disappointed followers changed their course and trotted off in the opposite direction, leaving him to make his return journey alone.

Although I was relieved to know that the reckless galloping troop was not coming my way again, I still felt far from easy in my mind, and I had, to all appearances, good reason to be afraid, for as the long-necked captain

while I may find light and with it will return the dream-like beauty of yesterday.

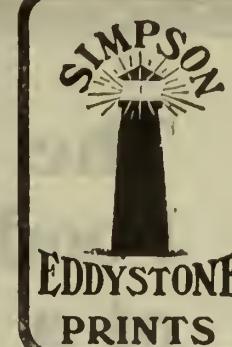
Yesterday! how long ago that seems!

Surely it is ages since I have had

anything to eat, since I have lain

joyfully and contented in the warm

sunshine.



Simpson - Eddystone Silver Greys

Beautiful. Cheerful. Dignified. They make dresses whose appearance far surpasses the looks of other materials equal in cost. They wear better, and are good all the year round.

Ask your dealer for Simpson-Eddystone Silver Greys.

Three generations of Simsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks **WHY** you ought to insist upon getting a **LOWELL INGRAIN**—the **all wool** kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. **LOWELL INGRAINS** are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a **hollow stick**, it's a genuine **LOWELL INGRAIN**.

When you buy carpets, ask the local dealer for **LOWELL INGRAINS**. Look for the **hollow stick** and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.**, New York

of the herd continued to approach he seemed to assume gigantic proportions, and the deliberate canter with which he made directly for me promised more danger than had the mad rush of his comrades, since I was fortunate enough not to lie in their path.

When at length he reached me I sank down close to the ground, and shutting my eyes tight expected the worst. But somehow he seemed in no haste to devour me, for when he came within a few feet of where I crouched, the heavy hoofs ceased to move, and raising my eyelids the least bit I saw him stretch his neck and lay his head near the ground in order to scrutinize me more closely.

Presently he walked up and touched me gently with his warm nose, and his long mane seemed to fall over my back and cover me like a shawl. Then for the first time I gathered courage enough to open my eyes and I saw with pleasure that, notwithstanding his mammoth size, the intruder was not such a fierce creature after all.

In the first place, he was very fleshy, and perhaps this fact helped to make him so much larger than any respectable horse ought to be.

In color he was a dark glistening bay, and the wavy black mane and tail almost swept the ground. Just now as I peered anxiously up at him, he regarded me solemnly through a luxuriant black foretop, and in the depths of the kindly brown eyes I felt that a knotty problem was trying to solve itself.

He was surely at a loss to know what to do. He looked at me helplessly, then neighing softly raised his head and glanced in the direction of his retreating comrades. Bending down again he tore up a great mouthful of grass and held it between his strong white teeth. This last act seemed to afford him an inspiration, for the troubled look left him at once and he began to shove me about with his nose; so insistent did he become that I had no other choice than to rise to my feet. This accomplished, the big horse was greatly encouraged. His next step was to gather small quantities of grass and as it left the earth with a musical rippling sound, I was charmed into imitating him.

We traveled slowly on, and before I realized what I was about, the dreadful gnawing hunger had left me, and I was almost comfortable. The heat of the sun, added to the exercise I was taking, warmed me thoroughly and for the time being I forgot my sorrowful plight.

After a while we came to a spring where the water gushed up as clear as crystal. My new friend bent his head and drank long, delicious sips, and watching him I quickly learned to do the same. The big horse seemed pleased with my aptness, for after looking at me a moment with unmistakable admiration he laid his heavy jaw upon

LOW ONE-WAY RATES

VIA

UNION PACIFIC

FROM

TOPEKA

EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

CONGO NEVER-LEAK ROOFING

It's proof against water, acids, alkali, climate.

It's a most excellent fire resistant. It is odorless and will not stain water.

Easily and quickly laid by anyone.

Suitable for flat or steep roofs.

Write for booklet and sample and learn more about it.

BUCHANAN-FOSTER COMPANY
448 Chestnut, Philadelphia

my neck and appeared to be taking in the beauties of the landscape.

Feeling as I did such gratitude for his kind attentions, it would have been the height of impoliteness to give any sign of weariness, even though I languished under so great a burden, for I verily believe that the big horse's head weighed more than did my whole body.

As soon as courtesy would allow, I drew gradually off and made a pretense of nibbling the tender grass. This seemed to bring my friend to his recollections, for after glancing lazily about him, he started in a cumbrous trot up a nearby hill while I followed closely at his heels.

At the brow of the hill we came suddenly upon two men who were digging deep, round holes in the ground. They were so busily engaged in work and conversation that they did not notice us at first and the big horse, taking advantage of this fact, scratched his chin against the loose board on top of the fence.

Those being the first persons I ever saw, I watched them very closely and also a little fearfully, not having much trust in strangers, and although I walked up quite near, I was prepared to spring off at the least sign of danger. Still the pair worked on entirely regardless of me and my timid feelings; nor did they even turn their eyes in our direction until my companion, growing reckless with the vigorous exercise he was taking, bent the board so far back that it snapped sharply and then fell clattering to the ground. Both men looked up hastily, but instead of being either frightened or angry they laughed good naturedly.

"Well, if that isn't Big Jake!" exclaimed the younger of the two, dropping his spade and advancing toward us, at which action I wisely retreated but still remained within hearing distance.

I knew my name wasn't "Big Jake," but of course could not tell what means might be adopted in order to capture me; the bay horse was less suspicious, in fact, he appeared not in the least disturbed.

"Don't you know me, old fellow?" queried the man as he came nearer, then gladly, "Of course you do, and you are as fat as ever and as wise as ever, and, Jakie boy, where did you get that poor, starved-looking little colt?"

Big Jake, who was nibbling softly at the speaker's hat, laid his head on the broad shoulder and whinnied gently.

"Ah, you say he just followed you. To be sure he did, and I don't blame him either. Didn't I follow you many and many a time myself?"

Just then the other man came up, mopping his face with a large, blue handkerchief. The sight of his friend discoursing with Big Jake seemed to amuse him very much. He stood in an attitude of mock attention, leaning his head forward as if to drink in every word. His fellow workman, knowing nothing of all this, went on talking.

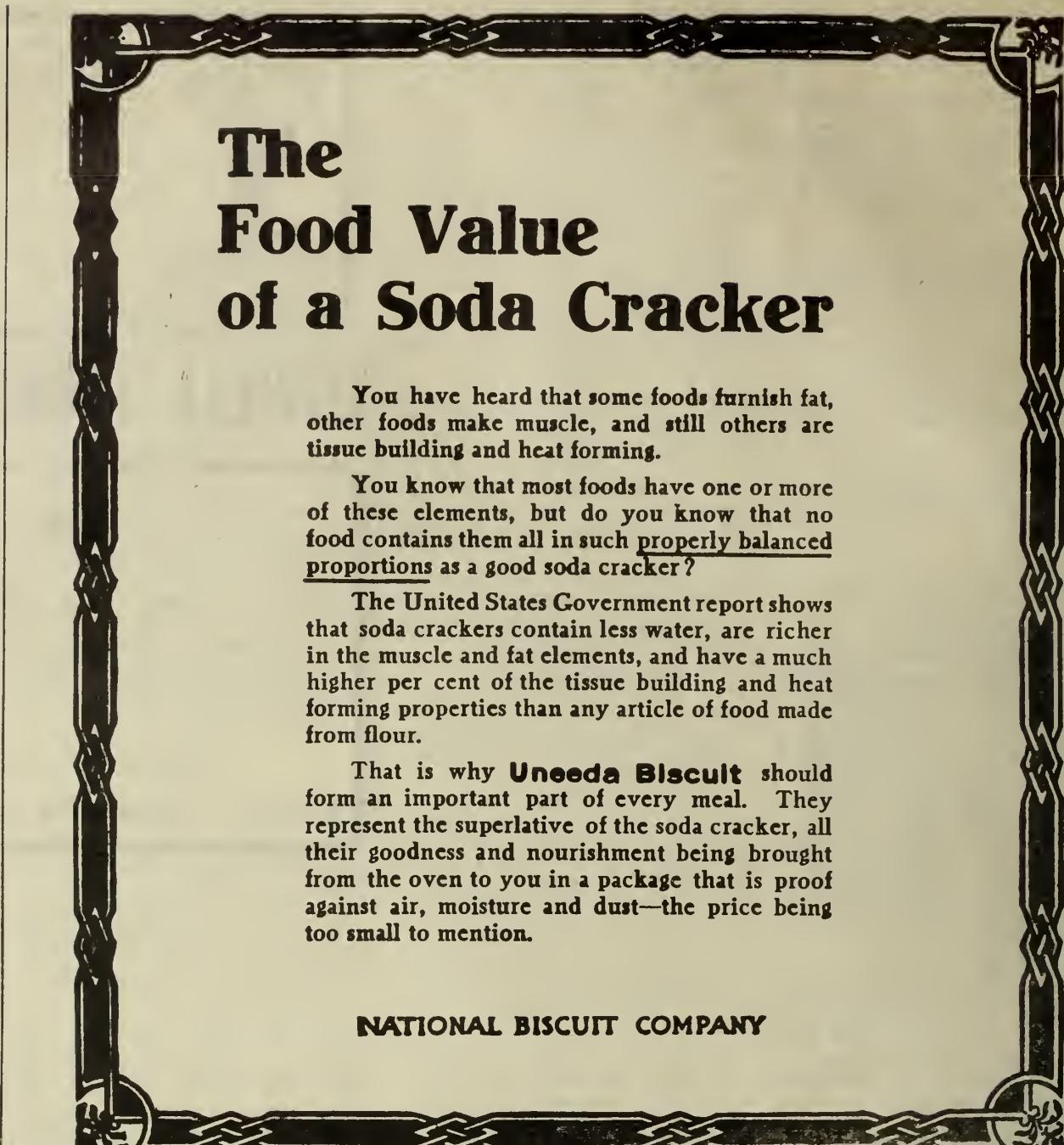
"And don't you remember, old man, the day you refused to go over the railroad track? How I thought you had balked and how I scolded you because I was in a hurry? And you, wise chap, never stirred an inch, and I was just in the act of lashing you when the train thundered by. That was one of the times you saved my life and, Jakie, do you know that I have always since been glad that I am slow to use the whip?"

I drew a little nearer, and the jolly man who was listening with so much mockery ceased laughing. Big Jake tossed his head carelessly, as if to say, "No horse would have gone over the railroad track just then."

There was small doubt but what those two had been old acquaintances. The voice went on, thrilling with the memory of days gone by.

"That awful snowy night when we were delivering the Christmas things. Every horse on the whole force but you, Jake, gave out, and your poor hoofs were a sight to see. Have they grown out? So they have, and are just as good as new. No one would guess that you ever suffered, old fellow, you have such a prosperous appearance. Something like myself, eh? Well, it's just as good to keep a brave front, but we won't forget what we went through together. Let me see if I can find the scar where the shaft pierced. Oh, that reckless snob! Yes, here it is, covered up, of course, with glossy hair.

"I can never forget how you moaned, Jake, and when the Vet said you couldn't get well I looked all over town for the heartless villain that had killed you. He was gone, though,



The Food Value of a Soda Cracker

You have heard that some foods furnish fat, other foods make muscle, and still others are tissue building and heat forming.

You know that most foods have one or more of these elements, but do you know that no food contains them all in such properly balanced proportions as a good soda cracker?

The United States Government report shows that soda crackers contain less water, are richer in the muscle and fat elements, and have a much higher per cent of the tissue building and heat forming properties than any article of food made from flour.

That is why **Uneeda Biscuit** should form an important part of every meal. They represent the superlative of the soda cracker, all their goodness and nourishment being brought from the oven to you in a package that is proof against air, moisture and dust—the price being too small to mention.

NATIONAL BISCUIT COMPANY

slipped out in the night like the coward that he was. But you pulled through all right after all. It takes a good deal to destroy a hero."

As he concluded he stepped back in order to better admire the hero, at the same time coming down stoutly on the other workman's toes, and was thereupon brought back to earth and present things by a vigorous shaking.

When Jake's old friend had regained his hat which had fallen from him in the midst of the scuffle, the two men went off together laughing, but when they had gone only a few feet one of them turned and called back merrily, "Goodbye, Jake; see you later," and my big comrade replied with an energetic nod and the pricking up of his long ears.

After watching the retreating forms of the workmen until satisfied that they were not coming back, Big Jake opened his jaws in an expansive yawn, then slowly and laboriously bent his knees under him and stretched himself with a contented sigh on the soft grass.

Immediately I felt lonely, and covering the short distance that lay between us, I bent low over the mammoth head. Big Jake, the hero, was actually snoring!

The Little Ones

Fay Folk.

Some nights I try to keep awake
To see how fairies really look.
(You have to watch so sharp and still,
So says my mamma's Fairy book.)

I squint my eyes a tiny space
And then I see them—one by one—
Come trooping in from Fairyland
With funny little hop and run.

They nod and whisper to themselves—
Then scamper off across the floor
As if they'd never, never seen
A little boy like me before!

Yet if you ask me how they look—
Somewhat I can not seem to tell;
For pretty soon they've slipped away—
And then I hear the breakfast bell.

—Laura Simmons, in Lippincott's.

Mr. Whirligig.

"Look at it! Look at it quick, Helen!" cried Ruth,

"Do you 'spose its dizzy? Oh, it's

just a butting its head into that board!"

"Acts just 'zactly like our little kitten did when it had a fit," said Helen, resting her hands on her knees and bending above the strange insect.

Ruth came running up to me flushed and breathless. "Can you come very quickly, mother? A poor little bug is having a fit or something," she said.

I walked down the bank at once. Ever since the little girls had begun to watch the ant-hill they seemed to have become more interested in the insect and animal life about them.

I followed her to the edge of the pond, where Helen bent above a very large whirlygig beetle.

"Oh, that's Mr. Whirligig," I said. "Did you never see him before? He isn't having a fit, and he isn't crazy, either. That's just the way he intends to act. You see he is named Mr. Whirligig Beetle because he spins round and round like a top."

He was of a bright, bronze color, and he was using his hind legs for oars, and his fore legs for rudders.

He looked very funny, and I was not surprised that the little girls concluded he was crazy.

"Do you see his eyes, Ruth?" I said. "He has a pair of eyes on each side of his head. One-half of the eyes look up and one-half down. Isn't that strange? The eggs are put on leaves or stems above the water, and a silk case or bag is spun to hold them. Mr. Whirligig is usually a small beetle and whirls, whirls, whirls. Then he keeps still for a second and then begins again."

"He is interesting, but I think that some of his cousins are more so. Mr. Whirligig lives near shallow water like this."

"What are some of his cousins," asked Helen.

"Oh, he has a great many, for Mr. Beetle belongs to a very large family. Did you ever notice, perhaps out on the rose-bush, a tiny, horny little thing? It is bright red and shining, and has little black specks all over its back."

"Lady-bug, Lady-bug, fly away home, your house is on fire and your children will burn!" cried both the little girls at once.

"Yes, you've guessed it. We call her the Lady-bug, but she is one of Mr.

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" **KANSAS FARMER**, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the **KANSAS FARMER** three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.

P. O.

PAROID

Before you buy roof-ing for any building, from a small poultry house to the largest mill or factory, it will pay you to get samples and complete proofs of quality from the oldest makers of ready roofing in America. (We originated the roll of roofing ready to lay with fixtures packed in the center.) Our concern was

Founded in 1817

We can show you why "Paroid" is the best of them all—lasts longer and saves most in repairs. Drop us a postal to-day.

F. W. BIRD & SON,

New York, Washington, Chicago,
Hamilton, Ont.

ROOFING

Whirligig's cousins. In its life the beetle makes three changes. First of all is the little white or light-colored egg; then a fat, greedy, white worm, not at all attractive looking. This is called the larva, and means 'a musk.' It's a very good name, too, for you would never guess that the fat, white worm you find hidden away under a stone, or in the earth, is a child of Mrs. Beetle. It does not look in the least like her. After this it becomes a pupa—and that means 'a baby.' It is in a case now, or a cradle which looks much like a hen's egg. It is folded up in this little cradle, with its wings packed close by its side, its jaws and feelers laid on its breast, and it has nothing to do but wait. When it becomes like its mother, we call it the 'Image state.' People like to study beetles because they are so easy to get, and many of them are very beautiful to look at. Sometimes the beetle-cases are dotted and lined in such a wonderful and perfect way that they look as if they had been carved from wood. In olden times there was an insect of the family of rose beetles in Egypt. The Egyptians considered it sacred and worshiped it. Sometimes they would wear a stone or wooden image of it about their necks to keep off harm. This kind is called the golden beetle and is very pretty. It does not hold the wing-cases apart when it flies, but wide, thin gauze wings come from beneath them. The body, head, legs, and wing-cases are a beautiful golden green with silver lines and spots. It's a very brilliant looking insect as it darts about in the sunshine. But people do not like it for all that, for it spoils rose-bushes. The farmers dislike all kinds of beetles for they are such a large and greedy family. They spoil trees and crops."

"They are nice to learn things about, but I believe I like our ants better," said Ruth.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wleshard, Iola
Cor. Secretary.....Mrs. N. J. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.
Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalfont Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabeon Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County (1902).
Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmon Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
West Side Study Club, Delphos (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

The Traveling Libraries.

There are many things to be enjoyed in this world of which we do not have to avail ourselves. One of these things that is "free for nothing" is the pure, fresh air. Most people are too much absorbed with other things or too lazy to take in more than half a breath, when long, deep breathing would send the blood through the system giving renewed life and energy to the whole body.

But I started out to tell about the Traveling Libraries which are rendering such splendid service to thousands of people who have availed themselves of their opportunities and advantages, and to urge the clubs that have not enjoyed their benefits to proceed to do so at once. One of the long-felt needs of people living in small towns and the country has been that of plenty of good literature—such as is afforded by the free libraries of the cities—and these libraries fill this want. They are made up in cases of fifty books each to suit the individuals ordering, thus reaching the needs and tastes of the people. These libraries make it pos-

sible for any one to have entertaining and wholesome reading—no matter how remote he may be. These are especially well adapted to the needs of women's clubs in the country. It was through the work and influence of club women that this benefit can be enjoyed. These libraries will be sent to any group of persons to be used for six months. There is no charge made for their use, but \$2 is charged to defray the expense of sending them. That is a very small amount when divided among all the members of the club. Every club in country or town where there is no public library should arrange to use these.

FAMOUS WOMEN.

Madame De Staél.

I. Life of Madame De Staél.
II. Madame De Staél's literary merits.

III. "Corinne."

IV. Madame De Staél and Napoleon. I. One of the most brilliant women that ever lived is the subject of this sketch. She was precocious as a child and was given every opportunity by her admiring and wealthy parents, both as to instructors and society, and fortune smiled upon her from the first.

II. While she was especially noted for her social successes and attainments, she towered above the women writers of her time. Her literary career began before she was twenty and ripened with age. She was fifty when death overtook her, but even then, she was pronounced the most intellectual woman in the world.

III. "Corinne" was published in Paris ten years before she died. One writer says of it: "It is one of the few immortal books which the heart of the world cherishes." It will make interesting reading and a review of it would be interesting.

IV. Napoleon and Madame De Staél were enemies. While she believed as he did in politics, she had no confidence in his sincerity and detested him as soon as she saw him and opposed and defied him. Her bitter sayings and ridicule so irritated him that he banished her from her beloved Paris.

Federated club departments will be conducted in the following Chautauqua assemblies during the coming summer: Ottawa, June 19-29; Winfield, June 19-29; Pittsburg July 2-12; Clay Center, July 27-August 5; Lincoln Park (Cawker City), July 27-August 5.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, 1906, by Davis W. Clark.) Matt. 1:24-25; I Cor. 3:10-15; Eph. 2: 19-22; I Tim. 6: 17-19; II Tim. 2:14-19. April 1, 1906.

Lives That Endure (Consecration Meeting).

The human soul covets the quality of permanence. It revolts from the ephemeral. It seeks something which will resist both time and change. This is what the pyramids and Coliseum mean. But after all this quality is not found in any material substances. It is the characteristic excellence of the human spirit alone. After the material structures that are in the world, even the most enduring of them, have been burned up, the characters of the builders, be they good or evil, will survive. Goethe falls a little short of the Christian ideal when he says, "What we poor mortals have to do is to keep ourselves upright as well and as long as we can." There is a hopeless tone in that which is not characteristic of the teaching of Jesus. He who does the will of God abides forever. He builds on bed-rock, and may defy all winds and floods. In no other way will the human craving for permanence be satisfied. After elements melt and heavens are rolled together, character will survive and endure.

Homeseekers and investors are beginning to realize that the dry irrigated lands of the famous Arkansas Valley in Western Kansas and Colorado possess the greatest value of any farm lands of the country. These lands yield annually over 60 bushels of wheat per acre. The average net returns from sugar-beets is \$95 per acre. The well-known firm of D. H. Bane & Company own many thousand acres under irrigation, and are offering them at prices per acre within the net returns of a single year's crop. Crop failures are unknown in that rich section where the United States Government is spending three million dollars for the benefit of homeseekers and investors. Write to P. C. Reilly, 824 Kansas Avenue, Topeka, Kans., for detailed information about this wonderful region.

Attention is directed to the new advertisement of the Jumbo squabs and Buff Orpingtons and Buff Leghorns as described in the new catalogue from our advertiser, W. H. Maxwell, 1220 Quincy Street, Topeka, Kans. To breeders of the variety named and squab-breeders this catalogue will be of special interest and it will be sent free to any one requesting the same.

THE KANSAS FARMER

\$19.90 **CREAM SEPARATOR**
TWO MONTHS' FREE TRIAL

\$19.90 IS OUR PRICE FOR THIS WONDERFUL NEW IMPROVED 1906 MODEL HAND CREAM SEPARATOR.

AT ABOUT ONE-FOURTH the prices charged by others, we furnish the highest grade hand cream separators made in the world. Compare with any other separators made, ours has

GREATER CAPACITY, skims closer, skims colder milk, runs easier, and

besides our price is a mere fraction of what others charge. We give

you two months' free use and free trial, we issue a binding twenty

years' guarantee, we take care of your separator for you free from

the day you receive it, and we will always in the years to come

furnish you any needed repair or part promptly on a day's notice.

IT IS SO EASY TO HANDLE that by following the simple printed instructions we

send you, anyone without previous experience can operate it at

once, and do better and more work than can be done with any

other separator made.

OUR SEPARATOR WILL SKIM 1,000 POUNDS

OF MILK PER HOUR

and do it closer, better and easier than any other separator of like size will skim 500 pounds in one hour.

OUR SEPARATORS will skim twice as close, twice as easy, last twice as long as any other hand cream separator made, and yet we furnish it for just a few dollars compared with the prices charged by others. Our price is based on the actual cost of material and labor, and is a small part of what others charge,

AND OUR TERMS ARE SO LIBERAL TOO.

OUR GREAT FREE OFFER.

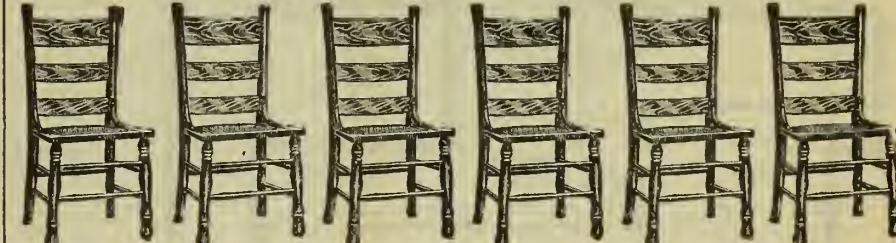
On a postal card or in a letter to us simply say, "Send me your Free Cream Separator Offer," and you will receive by return mail free, postpaid, our very latest special hand cream separator catalogue (just out), with pictures of our machines, copies of medals, diplomas and awards taken at different exhibits all over the world in competition with other separators, pictures of all the parts, full descriptions, testimonials, official and general endorsements and our great \$1,000.00 quality challenge, also copies of our guarantees, etc. We will also send you our two months' free trial proposition.

Our separator will save you \$10.00 to \$15.00 a year on every cow you keep, paying for itself several times over in a year, besides two months' use costs you nothing. Don't fail to write and let us mail you our free book and wonderful free trial separator offer.



Write today for our new and wonderful Cream Separator Offer.

THESE SIX CHAIRS FREE.

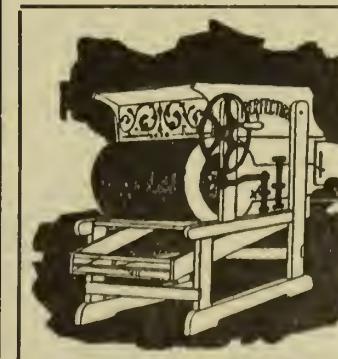


We will send you free these six large, full size, beautifully finished, handsomely embossed, hardwood cane seated chairs when all your orders to us have amounted to \$50.00, or you can have your choice free of many other valuable pieces of furniture or other useful things; a buggy, harness, saddle, bedroom suite, organ, couch, dresser, or your choice of hundreds of similar valuable articles. All this will be fully explained when you write for our Free Cream Separator Offer. On a postal card or in a letter to us today be sure to ask us to send you our Free Cream Separator Offer, and get all we will send you free by return mail, postpaid. Address,

SEARS, ROEBUCK & CO., CHICAGO.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: ::



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

\$8,000 Net Income Every Year On A QUARTER SECTION

Of Irrigated Land in the Arkansas Valley of Colorado and Kansas

You can till as large an acreage under irrigation as without. The idea that an irrigated farm has to be only a small garden patch, is an exploded theory. You can make a good living on a small irrigated farm and you can not on the other kind, but you can also manage a large irrigated farm with marvelous ease and profit. Send for detailed information to

P. C. Reilly 824 Kansas Avenue, Topeka, Kansas

**FOR A Y. M. C. A. BUILDING AT THE
KANSAS STATE AGRICULTURAL
COLLEGE.**

(Continued from page 369.)

and Rockefeller. Perhaps this would not succeed in any case, and it may be objectionable to many Kansas farmers who would themselves prefer to endow such a building at their own Agricultural College.

A. M. TENEYCK.

A History of the Movement.

The movement for a Young Men's Christian Association Building was publicly inaugurated May 22, 1904. On that

ent scheme of enlisting the sympathy of the farmers of the State will result in a speedy completion of the project.

LOCATION.

The building will be located on the Association lots, corner Fremont and Ninth Streets, just north of the northeast corner of the Park. This location has several advantages, among which may be mentioned (1) nearness to the Park, (2) center of the student population, and (3) location on the proposed paved road to the college.

GENERAL DESCRIPTION.

The building will be of stone, 76x45 feet, with gymnasium annex 70x42 feet.

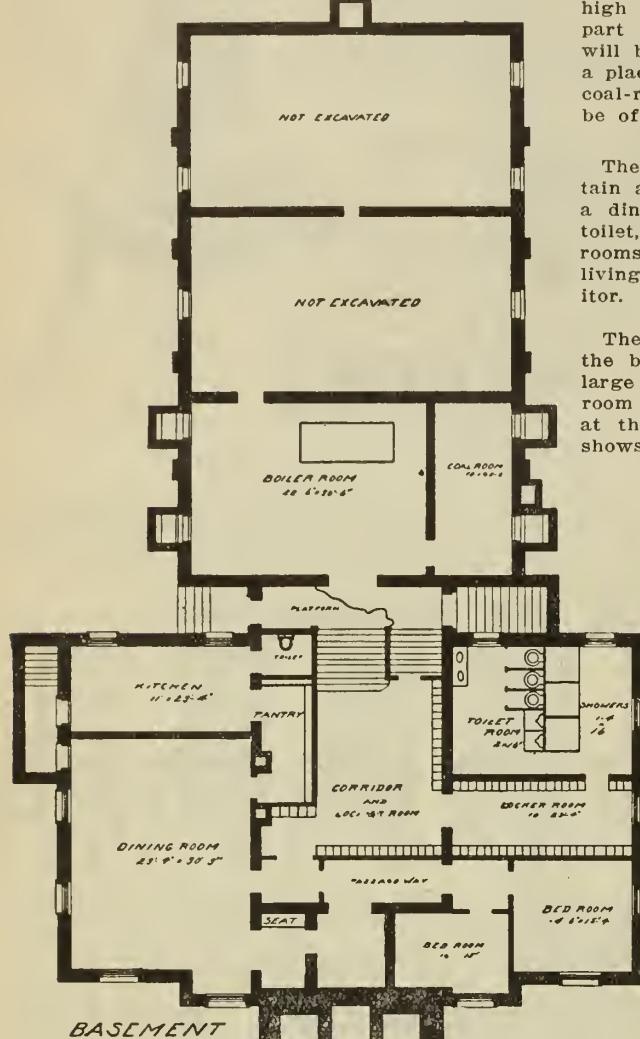
It will be three stories high and basement. A part of the gymnasium will be excavated to make a place for the boiler- and coal-rooms. The roof will be of slate.

BASEMENT.

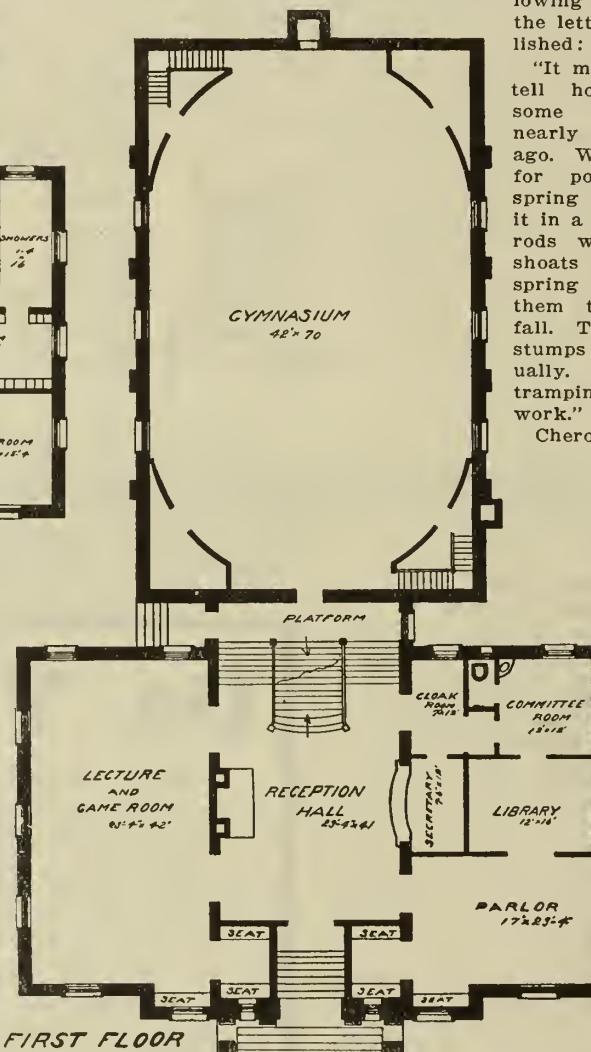
The basement will contain a kitchen 11x23 feet, a dining-room 23x30 feet, toilet, bath and locker rooms. There will also be living rooms for the janitor.

FIRST FLOOR.

The Main Entrance to the building opens into a large lobby or reception room 23x41 feet. A glance at the first-floor drawing shows that this reception



BASEMENT



FIRST FLOOR

day Mr. E. T. Colton, of the International Committee of the Young Men's Christian Association, made an eloquent appeal for an Association Building at a mass-meeting of the young men of the college. Nearly \$6,000 was pledged by the students at this meeting, and by the close of the term \$3,000 more was added. The average student gift at this time was about \$40.

During the next year \$5,700 more was subscribed by the students so that altogether over \$11,000 was pledged by students alone. This heroic giving has not been done by wealthy students, but for the most part by young men earning their way through college. Thirty-six of them have so realized the importance of a Y. M. C. A. Building that they gave \$100 apiece. No one can estimate the amount of sacrifice that the students are putting into this movement.

During the summer of 1904 a mail canvass was carried on among the alumni who responded quite liberally. In the fall, invitations were sent out to the business men of the city asking them to a banquet at the Hotel Gillette. Fifty-five of the most prominent business men of Manhattan responded favorably. H. M. Beardsley, of Kansas City, was present and made an address concerning the need for and purpose of an Association Building. A deep impression was made by Mr. Beardsley's excellent talk. A canvass of the business men was made immediately following this banquet.

On February 17, 1905, an offer of \$1,000 was made through the International Committee of the Y. M. C. A., by an unknown philanthropist in the East, provided the Association could raise \$5,000 more in three months. This offer stimulated giving to a great extent and the \$5,000 was raised.

The whole amount now subscribed is a little over \$22,000.

During the past six months the movement has not made much progress. The field around Manhattan is practically exhausted. Efforts were made, but without success, to get some man of wealth to give the sum required to complete the necessary amount.

It is earnestly hoped that the pres-

hall opens into a social or game room, 23x42 feet, to the left, a reading room, 17 x23 feet, and a library room, 12x16 feet, to the right in front, and the coat room, secretary's outer office, 7x12 feet, and inner office, 12x12 feet, to the right in the rear. The rooms on this floor are so arranged that in case of large social functions all can be utilized. The meetings of the Association will be held in the social room, which is to be provided with folding chairs.

SECOND AND THIRD FLOORS.

The second and third floors will be used entirely as dormitory rooms. Each floor contains nine sleeping rooms, bath and toilet rooms. These rooms will be among the best in town and will bring considerable income. In addition to this, there will be given the opportunity of concentrating the working force of the Association in one building.

GYMNASIUM.

There is an unmistakable demand for a gymnasium, as the college does not provide one. Even when it does there will still be need of a smaller gymnasium. The Association building will contain a gymnasium 70x42 feet. A running track will also be built.

CLASSIFICATION OF SUBSCRIPTION.

No. of contributors.	Amt. of each contribution.	Total.
11	\$1	\$11
6	2	12
2	3	6
1	4	4
86	5	430
2	6	12
2	8	16
171	10	1,710
11	12	132
28	15	420

3	16	48
73	20	1,460
1	24	24
102	25	2,550
1	27	27
17	30	510
1	32	32
2	35	70
1	36	36
18	40	720
2	45	90
56	50	2,800
1	52	52
12	60	720
1	65	65
7	75	525
61	100	6,100
9	150	1,350
2	200	400
4	250	1,000
1	1000	1,000
695		\$22,332

Average subscription, \$32+.

then cut is liable to sprout badly, while a hedge that never has grown beyond the bounds of a good fence rarely gives trouble. Even the neglected one usually gives a good return for the land used when the crop of posts is cut, and the wood is probably the best grown.

"If the woven wire fence takes the place of the hedge around the horse pasture, there will be less cause to regret its going, but the Osage orange has been of good service to the horse-raisers, and will probably continue to furnish posts for many upland farms, where the catalpa does not succeed."

ALBERT DICKENS.

"Relying to inquiry in KANSAS FARMER of August 13, I will give my method of killing hedge. Remove soil from each side of hedge-row, say about one spade deep. Then fill up with crushed rock salt, about 300 pounds of salt to 100 feet of hedge."

Rice County.

J. F. SMITH.

"In answer to E. Southwick, I tried mulching a few rods of hedge last year with fresh stable-manure. It proved quite successful; but as I find a few green roots this spring, I think it will take two years to clean it out, mulching the second spring the same as the first; and if any sprouts should come through, they should be pulled up, not cut down; they will pull easily."

H. D. SHINN.

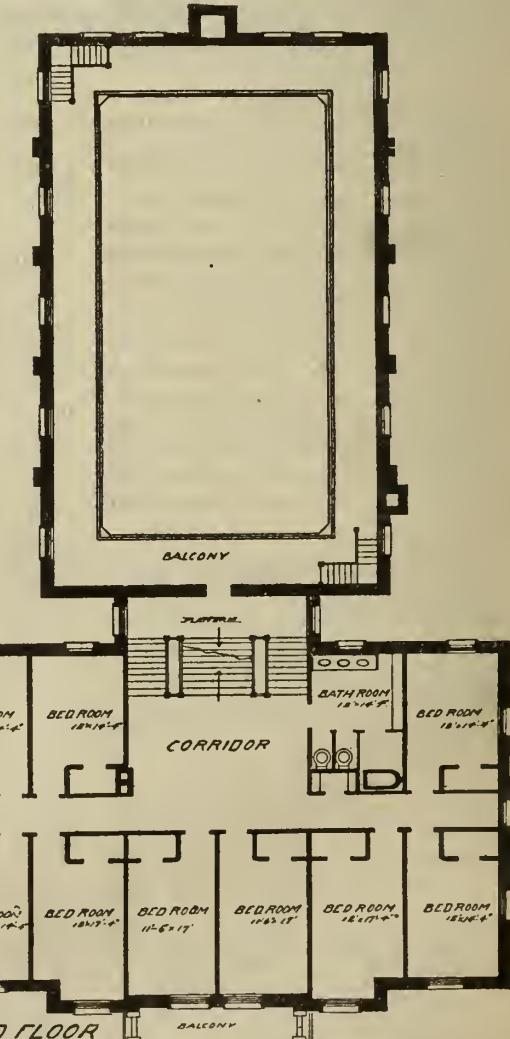
Montgomery County.

"One of your subscribers wishes to know how to kill hedge. I can tell you a cheap and sure way."

"Cut the hedge about four or five inches above the ground and take the ax and maul and split the stump like the letter X as deep as you can. Cut off a round pin and drive down into the center of the stump and fill full of strong salt (any dirty salt will do). This should be done any time from May 1 to July 15, and in one year you can plow up the stumps unless they are very large. It will surely kill them. After a heavy rain if the salt is washed out, put in a new supply. With a little attention I can kill the biggest hedge in the State in one season; or any other tree. I have used this for twenty years." A. M. MASON.

Crawford County.

"Relying to Mr. Southwick's inquiry, will say that the practice of



SECOND FLOOR

"Killing hedge is no easy matter. If thoroughly grubbed, the sprouts will cause trouble for some time. Cutting the hedge down during growing season, piling the brush on the row and burning when the new sprouts are well started is about as severe a check as can be given, but even then sprouts are sometimes very troublesome.

"If you grub it, about the easiest way is to trim the hedge high enough to allow you to work a plow close up to the hedge and then, with a road-plow and plenty of horses, get as close as you can before resorting to the spade and grubbing-ax.

"There are two sides to the hedge question and every one must choose his side. It costs considerable time and more patience and piety to keep a hedge-fence in good condition, but when well-kept it makes a handsome fence and is not likely to injure crops for any considerable distance. When neglected, it is certain to cost more. A hedge that is let run to posts and

mulching to kill hedge is quite common in this (Saline) County. After the hedge has been removed, usually by grubbing deep enough to allow plowing the ground, the row is covered with about three feet of mulch, preferably coarse manure and litter, as they pack closely and do not blow away. The mulching is left till late summer and then set on fire. The burning continues some time, and according to my observation kills nearly all the hedge the first time."

A.

Saline County.

February Imports and Exports.

Two-thirds of the fiscal year, ending June 30, 1906, has presented its commercial record, and the growth of commerce has been sufficient to justify the assertion that for the year both imports and exports will exceed those of any earlier like period. The exports of 1905 exceed those of any earlier year; yet the exports of that part of the fiscal year 1906 recorded are 190 million dollars in excess of those of the corresponding months of 1905. The imports of 1905 were also greater than in any earlier year, yet the import figures for the eight months ending with February, 1906 are 71 million dollars greater than those of the corresponding period of last year.

This growth in imports and exports is shown in detail in a statement just issued by the Department of Commerce and Labor through its Bureau of Statistics. It shows in exports a growth of 190 million dollars, manufactures being 45 million dollars in excess and agricultural products 133 million dollars in excess of the total for the corresponding period of last year. The large increase in exports of agricultural products occurs chiefly in wheat, wheat flour, corn, oats, and provisions. Of wheat and wheat flour, the exports in the eight months ending with February, 1906, were in round terms 64 million dollars in value, against 30 millions in the corresponding months of the preceding year. The exports of corn during the eight months were nearly 20 million dollars in excess of those of the same months of last year, while oats show an increase of over 10 millions and provisions an increase of 33 millions over corresponding exports last year. Exports in each of the great groups—products of agriculture, manufactures, the mines, the forests, the fisheries, and miscellaneous articles—show an increase over the exports of the same months of last year.

On the Import side all groups show an increase except articles of food, which in the eight months ending with February, 1906, amounted to but 171 million dollars, against 184 millions in the corresponding months of last year, the decrease occurring chiefly in coffee, tea, and sugar. Coffee shows a fall of nearly 12 million dollars; sugar, 5 millions, and tea about 2 millions, the decrease in these three items being nearly 20 millions, while in other articles of this class the increase is sufficient to make the net reduction in the entire group about 13 million dollars.

The most remarkable increase in the imports occurs in manufacturers' materials. The class "articles in a crude condition which enter into the various processes of domestic industry" shows for the eight months ending with February, 1906, a total of 264 million dollars, against 243 millions in the same months of last year; while the class, "articles wholly or partially manufactured for use as materials in the manufactures and mechanic arts," shows a total of 112 millions, against 92 millions in the same months of last year. Thus manufacturers' materials show a total gain of over 40 million dollars in the eight months ending with February, 1906, compared with the corresponding months of the preceding year, and seem likely to make by far the largest total of such imports in the record of our foreign commerce. The increase in the partially manufactured materials occurs chiefly in tin, copper, iron and steel, and chemicals. The increase in raw materials occurs chiefly in tin, copper, iron and steel, and chemicals. The increase in raw materials occurs chiefly in fibers, hides and skins, leaf tobacco, and raw silk.

The increase in exports of manufactures, aggregating 45 million dollars, occurs chiefly in cotton goods, which show an increase of about 8 millions; iron and steel manufactures, an increase of 16 millions; cars and carriages, an increase of 5 millions, and manufactures of wood, mineral oils, and leather, and manufactures thereof, each show an increase of about 2 million dollars, as compared with the same months of last year.

The rapid growth in the exportation of manufactures is illustrated by comparing the February, 1906, exports with those of February of each year during the preceding decade. It will be seen from the table which follows that the February exports in 1906 were nearly three times as great as those of 1896 while the growth of exports of manufactures for the entire eight months is correspondingly great, the total for the eight months ending with February, 1895, being 144 million dollars, against

387 millions in the eight months ending with February, 1906.

Exports of domestic manufactures from the United States during the month of February, 1896 to 1906.

Month of February—	Total.
1896.	\$17,259,459
1897.	20,248,989
1898.	21,080,901
1899.	24,489,860
1900.	34,226,128
1901.	30,302,592
1902.	31,740,842
1903.	32,612,784
1904.	35,189,012
1905.	39,386,084
1906.	46,586,585

Growing of Pitted Fruits.

We have exceptional climatic and soil conditions in Harper County for the growing of pitted fruits. Experiments conducted by the writer for the past ten years confirm this. We can grow abundantly the best peaches, plums, and cherries. The old peach orchard on the Firestone farm has fruited almost every year for nearly fifteen years; most of that time the orchard has been in the care of tenants, and has been without care save an occasional plowing. The fruit has been uniformly excellent.

Experiments with American plums indicate that the Damsons, large and small, and the Chickasaw do well; the Wild Goose rusts and drops its fruit.

The Japanese do splendidly but are subject to black knot on rich soil; this is particularly true of Abundance and Burbank. Prunes promise well in growth; the writer has a tree which will fruit this year.

Cherries have long been such a successful crop that it is strange the planting has not been larger. The tart sorts are practically all that are set, the early Richmond, Montmorency and English Morello comprehending ninety-five per cent of the planting. A sweet cherry has fruited several years on C. C. Whitman's lots; it was planted by Judge Cade. Although a shy bearer and favored by the birds, a good deal of excellent fruit is saved from it each year. The writer has a sweet cherry, Gov. Wood, which will fruit this year; he has grown many cherry-trees but never had another as fine and thrifty as this tree. Cherry-trees on rich soil are subject to occasional blight; if three-fourths of those set mature to fruiting time, they are doing well. When weeds and grass are permitted among them they are short lived usually dying in fifteen or twenty years, mostly from starvation. Cherries should be set twenty-four by thirty feet to do well; apples should be twenty-four by thirty-two feet. All orchards should be protected by a wind-break entirely around them but thickest on the south and west.

A splendid wind-break can be made of Russian mulberry, set four feet apart and headed low, for the outside row; then a row of Osage orange six feet apart, with an inner row of the Osage orange set twelve feet apart, the rows to be ten feet apart. The mulberries will grow ten or twelve feet high, while the next row will grow twelve to twenty, and the inner row should reach twenty-five to thirty feet in height in ten years or even less time.—W. E. Blackburn, in Anthony Republican.

Corn at the Kansas Experiment Station.

The following questions have been asked regarding the experiments with corn at this station:

1. What variety made the highest yield in 1905, and where was the seed obtained?

2. What place did the Hildreth corn hold in comparative yields of different varieties?

3. Where do you place Reid's Yellow Dent corn in order of yields?

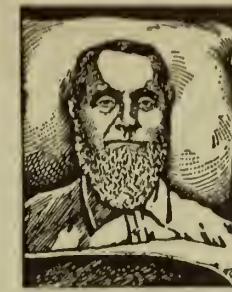
4. What place did Kansas Sunflower corn hold in the test? Is it an early or late maturing variety, and from whom did you originally secure the seed?

5. Do you or do you not believe that white corn will give larger yields on average Kansas soil than yellow corn?

6. What are the two best producing varieties of any color of corn which have been tested at the Experiment Station?

In our variety trial of corn last year (1905) some 80 different varieties were planted. Those varieties giving highest yields are as follows: Bicker's Chocho (yellow dent), Hildreth (yellow dent), Golden Row (yellow dent), McAuley's White Dent, Kansas Sunflower (yellow dent), Justin's White Dent, Warner White Dent, Elton White Dent, Forsythe's Favorite (white dent), Griffing Calico, Combination, Rummold (white dent), Hammett White Dent, and Leamington (yellow dent).

The highest yield recorded was 66 bushels per acre, by Warner's White Dent. This corn was tested for the first time last season, and was only a small

**I CURED MY RUPTURE**

I Will Show You How To Cure Yours FREE.

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you. Write to-day. Capt. W. A. Collings, Box 109 Watertown, N. Y.

plot about one-half as large as the others. The seed came from J. Warner, Manhattan, Kans., and the corn was originally brought from Missouri, where it had been grown on the same farm for fifty years, according to Mr. Warner's statement. I do not know whether Mr. Warner has seed of this corn for sale or not.

The next highest yield was given by Combination which yielded 58.75 bushels per acre. This corn is sold by the Zimmerman Seed Co., Topeka, Kans., and is a mixed corn. This was the first trial of the corn made at this station, and on account of its mixed type it is less desirable than pure-bred varieties. The third highest yield, 57.3 bushels per acre, was given by McAuley's White Dent. The Griffing Calico ranked fourth with 56.6 bushels per acre. Justin's White Dent ranked fifth with 56.4 bushels per acre. This is the first year that this corn has been grown here. The seed was received from J. M. Justin, Manhattan. This is a red-cobbed white corn, very similar to the St. Charles White. I do not know whether or not Mr. Justin has seed for sale. The Elton White Dent (seed secured from E. F. Elton, Waldo, Kans.) yielded 54.7 bushels per acre; Golden Row, 53.75 bushels. Seed of this corn was secured from the Nebraska Experiment Station. The Hildreth corn yielded 51.75 bushels per acre; the Kansas Sunflower, 51.1 bushels; Hammett White Dent, 48.4 bushels; Boone County White, 46.3 bushels; Silvermine, 45.9 bushels; Reid's Yellow Dent on one plot yielded 45.1 bushels, and on another plot 42.3 bushels per acre.

The Kansas Sunflower corn dropped a little this year, but the average for the three years is well up toward the top. It is a medium late-maturing variety, and I consider it very hardy and one of the best for general planting.

As an average for three years the Hildreth ranks first, and in my judgment McAuley's should rank second, although we failed to secure the yield on it for the first year of the three. It ranked above Hildreth for two years.

We secured seed of the Kansas Sunflower corn from John Moody, Eudora, Kans. The Hildreth is an excellent corn, only rather late in maturing. Our supply of seed-corn is exhausted, except a little third-grade seed of McAuley's White Dent.

You will see that the Reid's Yellow Dent does not rank up with some of the native Kansas corn. It is a good early maturing corn and in Northern Kansas perhaps will rank better, as compared with late-maturing varieties, than it does at this station or further south. It is true, however, that the Reid's corn seems to be running out a little. We find a great many ears with smooth kernels—a tendency to flintiness—at the tips of the ears. Also some ears have shallow kernels, and the shoe-peg type of kernel is too prevalent. This corn also has the fault of often having too tapering a kernel, the kernels being very tight together at the crown but separated at the tip. By selection we are removing these defects, but this is the way the corn appears when we bring it from Illinois. I have little doubt that some of our best producing native Kansas corns will soon outrank the Reid's both in yield and in the winning of prizes at corn shows. Up to this time, however, Reid's Yellow Dent has stood well in contests because we are able to select a uniform type and well-finished ears.

As to whether white corn will outyield yellow corn depends upon the variety and also upon the conditions. Some varieties of white corn yield better than other varieties of yellow corn at this station, while the reverse is also true, certain varieties of yellow corn yielding better than other varieties of white corn. It may be true that white corn varieties, as a rule, have been those which have been grown under adverse soil and climatic conditions, producing hardy types of corn and good-yielding varieties under more unfavorable conditions. Under the more favorable conditions of fertility, moisture, and climate, varieties of yellow corn may outyield varieties of white corn; however, the question is a matter of variety rather than of color.

We have made tests for three years

with some varieties of corn. I place the McAuley's White Dent first as being the best producer of the white dent type. I am not so sure which variety should take second place, but the Boone County White is among the best. For your section of the State the Hammett White Dent might class second, or even first. The Hildreth corn stands at the head as the best-producing variety of yellow dent corn as an average for the three years' trial, while the Kansas Sunflower may rank second. Last season, however, as you will observe from the enclosed copy of letter, several of the new varieties tested outyielded the varieties named. There may be other varieties of corn equal or superior to those named, but we have not tested others for sufficient time to be able to recommend them as preferable to the varieties named. A. M. TEN EYCK.

Sow Alfalfa Without Nurse Crop.

I have ten acres of well-tilled corn ground which I wish to put into alfalfa. Would like information as to how and when to prepare seed-bed, time to sow, quantity of seed per acre, and what to use as a nurse crop. Any information you may see fit to give will be thankfully received. D. M. VAN PELT.

Mitchell County.

Prepare a seed-bed at once by diskling and harrowing and sow as soon as possible. We are now (March 31) seeding alfalfa. Twelve pounds of good seed is sufficient to sow per acre. Sow without a nurse crop. Alfalfa seldom makes a good stand when sown with a nurse crop. Clip the weeds with the mower two or three times during the season, but do not cut the alfalfa close to the ground early in its growth. Raise the sickle-bar so as to cut 4 to 6 inches high. If the young plants are cut off when they are small and tender and before a good root-growth has been established, the alfalfa is likely to be destroyed. I have mailed to you a copy of Bulletin No. 114 giving further information regarding the seeding and culture of alfalfa. A new bulletin, No. 134, will soon be published on this subject, a copy of which you may secure by writing to J. T. Willard, director of experiment station.

A. M. TEN EYCK.

A woman recently engaged to a widower asked his son, a little fellow of seven years: "How would you like me for your stepmother?" "First rate, as far as I am concerned," he replied. "You will have to speak to pa about it, though."—Illustrated Bits.

The Great Salt Lake, in Utah, is now crossed by a trestle bridge over twenty miles long. It is the longest trestle bridge in the world, and bears a railway, thereby saving a circuit of forty-four miles.

A Home For Half the Money

In the Pacific Northwest. A handsomely illustrated 88-page book,

"OREGON WASHINGTON IDAHO AND THEIR RESOURCES"

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig,

ROOM 212 WORCESTER BLDG.,

PORLAND, OREGON.

Horticulture

The Wellhouse Rabbit Trap.

At this season of the year when the damage wrought by the rabbits is seen at its worst, inquiries are sent to the KANSAS FARMER as to measures to be taken against this pest. One of the most successful plans is to trap the rabbits. This has been the method pursued for protection of the Wellhouse orchards for many years. THE KANSAS FARMER has frequently published descriptions of the Wellhouse trap. The illustration heretofore used was not quite accurate, so at the request of the editor, Master Walter Wellhouse, grandson of the apple king, has prepared an accurate drawing from which was made the engraving herewith. The

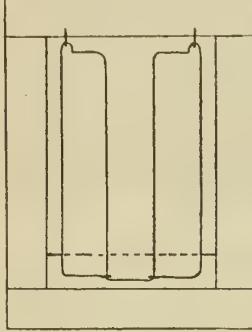


Fig. 1, Front.

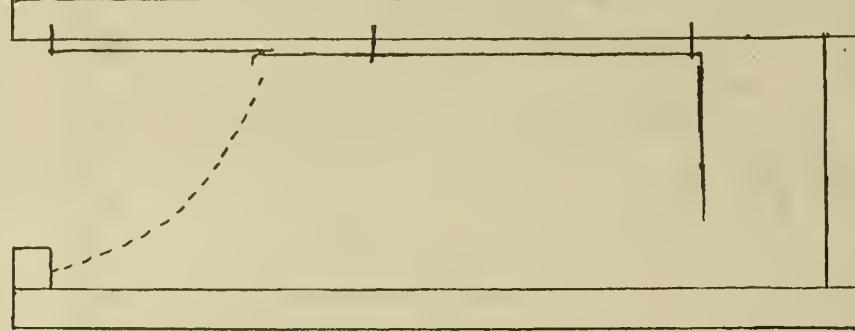


Fig. 2, Section.

The Wellhouse Rabbit Trap.

test of materials used will be found useful. Following is the description as dictated by Judge Wellhouse several years ago:

MATERIALS USED IN MAKING THE WELL-HOUSE RABBIT TRAP.

Four pieces 1 by 6 by 21 for sides, top, and bottom, one piece 1 by 6 by 8 for back; one piece $\frac{3}{8}$ by $\frac{3}{8}$ by $3\frac{1}{2}$ for door stop; $2\frac{1}{2}$ inches wire for door; 22 inches wire for trigger; $4\frac{1}{2}$ inch staples made of number 15 wire; 480 feet or twelve pounds No. 12 galvanized-iron wire and one pound of staples are required to make one hundred traps.

The Wellhouse trap is a box made of 6-inch fencing, old boards preferred. It is 21 inches long. The front end is closed only by a wire door which is hung from the top and opens inward. A cleat across the bottom prevents the door from opening outward. In setting the trap the door is fastened open by a wire which is attached loosely along the under side of the top board of the trap. This trigger-wire is bent downwards near the rear end of the trap and formed into a loop or a figure 8, so that as the rabbit crowds into the rear end of the box he is sure to push against this wire and thus move it backwards, releasing the door, which falls and makes him a prisoner.

The cottontail is generally looking for some dark hole in which to hide as a protection from enemies and cold, and this trap easily suits his mind. The great advantage of the Wellhouse trap is that it catches the rabbits. About three of these traps are used to the acre. They are not baited in any way. They may be placed in rows with the open ends in one direction in one row and in the opposite direction in the next row, so that when the boy goes to get the rabbits he can see into one row while going one way and into the next row while returning.

For jack-rabbits, greyhounds and the gun are perhaps the best remedies.

Care of Peach-Trees.

EDITOR KANSAS FARMER:—Having been highly interested in horticulture for many years, will bring up a matter which I consider of vital importance to the fruit-raisers of Kansas in particular. This relates to some means to prevent the destruction of the peach crop by frost. After several years' study and investigation of the matter, I believe that we may be able to raise a crop each year by pruning and protecting the trees. One instance which came under my observation is this: I noticed a tree by a ditch, which had been blown down and turned over by the wind. It was lying on the ground. Some straw was thrown over it in the fall and remained all winter. In the spring it came out in full bloom and yielded a crop of peaches. Another instance was where a tree was partly under a straw stack and was protected from the frost. It came out in full bloom in the spring. In both of these instances, these were the only trees

in the orchard that had a peach on them.

The plan I have in view is this. First give each tree a thorough treatment of pruning. In the fall by means of a draw rope, such as we used to draw our corn shocks together, bring the limbs close together. Then take old stack-stuff or ducking and sow around the tree from the body up, so as to form an enclosure, leaving it open at the top. Now take a step-ladder and through the opening in the top, fill the enclosure with chaff or fine straw, shaking the tree thoroughly to pack the straw. Next take a piece of oil-cloth and sew over the top and the job is completed. This can be done at an expense of not to exceed 50 cents per tree, over the labor. Two men can treat from 20 to 30 trees in a day. Think of having 20 or 30 trees full of fine peaches in an orchard in an off year—or an entire orchard—with no others in the locality.

plied for six weeks each year and plenty over for canning or for grape-juice.

Practically all the vines which die in this section may be said to be lost from overbearing. Even a moderate crop will kill a vine if the soil moisture is shared with weeds, trees, or grasses. A few tender varieties winter kill; vines of the Labrusca (Concord) family, have shallow spreading roots and suffer severely in dry years with even a light crop of fruit.

For table use plant Campbell's Early, a black grape; Green Mountain, white; and Headlight, red; all ripen from August 1 to 10. Then Worden, black (of the Concord family but larger and ripens earlier and evener); Beacon, a black, finely flavored grape, excels the New York Concords; Niagara, large, refreshing white grape; and Delaware, a medium red grape. These sorts are ripe from August 10 to 25. In setting a vineyard for table use, plant half of

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New *Floral Guide* FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK FRUIT BOOK shows in NATURAL COLORS and accurately describes 216 varieties of fruit. Send for our terms of distribution. We want more salesmen.—Stark Bros., Louisiana, Mo.

SEEDS That will Grow **PLANTS** That will Bloom
None better, even at the high prices. Special bargains: SEEDS, 10 pks. Annual Flowers, 100; 5 pks. Vegetables, 100. PLANTS, 6 Rose, 25c; Geraniums, 20c; 6 Begonias, 25c; 4 Pelargoniums, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Peas free.
A. C. Anderson, Columbus, Nebraska.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamond and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois

Iowa Produces the Best

SEED CORN

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 34, Farragut, Iowa.

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send 2c stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.

St. Louis, Mo.

WRAGG TREES

WE PAY FREIGHT. END for our handsome catalog of Trees, Shrubs, Roses, Evergreens, Etc. We deal Direct. Our prices are lowest. M. J. WRAGG NURSERY COMPANY, 347 Good Block, DES MOINES, IOWA.

The Worlds Fair Prize Winning Corn Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tells how to raise Corn every year FREE. John D. Ziller, Hiawatha, Kansas.

HE RAISES CORN.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

The Seed We Sell

GREGORY'S SEED CATALOGUE FOR 1906
One market gardener plants annually 75 pounds of our lettuce, another 500 pounds of our beet and a third 100 pounds of our onion seed. Such men can take no chances. We shall be pleased to sell you any kind of vegetable or flower seed equally good, from five cents' worth upward. Catalogue free.

J. J. H. GREGORY & SON,
Marblehead, Mass.

The Best Fruit Paper

is The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Every one who has a few fruit trees or a garden, should read

THE FRUIT-GROWER
ST. JOSEPH, MISSOURI

Every issue is handsomely illustrated and from 32 to 64 pages a month are filled with interesting matter pertaining to fruit-growing and gardening. The first four issues of 1906 will be handsome special numbers devoted to the following subjects:—January, The Horticultural Societies; February, Spraying; March, Gardening; April, Small Fruits. Any one of these numbers will be worth a dollar to you. We publish the "Brother Jonathan Series" of fruit books. Send your name and learn how to secure these books free. TRADE MARK BRO. JONATHAN
Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

FIFTH TERM
JONES' NATIONAL SCHOOL
Of
Auctioneering and Oratory
Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now enrolling in 15 states. For Catalogues write George M. Jones, President.

When the block is smoothed up it should be about 3½ feet in diameter at the top, and about 20 inches deep. Now we are ready to wrap the block with burlap or canvass, with slats or pieces of barrel staves about 20 inches long (old straight ones are good) tacked on about 2 inches apart. Put the canvass next to the earth and draw tight. Now take No. 12 wire and put one strand around the center and draw tight by twisting the ends together. I find it a good plan to cut slits in the canvass between a few staves and run wire through to keep the earth from slipping down and getting loose. Now put one wire near the bottom and then one next to the top and with a pair of pliers put kinks around in the wire to tighten it. If there is any space between the earth and canvass at the top, crowd the earth in with the hands so as to make it as solid as possible. We are ready now to commence to dig under, but we must be very careful not to disturb the ball of earth in the jacket. When we dig under all we can conveniently, we take a spud and drive down slanting all around the tree and finally drive the bar down on one side and push down, and the tree and ball of earth will lay over on one side. Then take a spade and trim off the earth on the bottom of the block smooth, but a little full in the center. Back the wagon up at right angles with the tree close enough so that one end of a 14-foot plank will go under the tree and the other end will rest in the wagon. Then put a couple of boards about 4 feet long, with cleats nailed across at each end, under the tree with a piece of 1¼ inch gas-pipe between. Now tip the tree up, take a rope long enough so that when it is doubled it will go around the block of earth, and to this hitch a block and tackle and by keeping rollers between board and plank, three men can easily load a tree with the block of earth that will weight 1,000 pounds. When it is on the wagon leave one roller under the tree. In moving smaller trees, I dig them the same way but instead of putting a board under the tree, I take a stout gunny-sack and by tipping the tree over, I work the sack under and with a man at each corner, we can slide quite a large tree up a plank into a wagon and leave the canvas under until we get the tree unloaded.

I have transplanted Scotch pines this way, that would make from 16 to 18 inches growth from the center bed the same year, so I think they might be safely moved with much less earth attached, but they would have to be anchored to keep the wind from tipping them over until they were firmly rooted. Now is a good time to transplant evergreens. I have moved them after they had commenced to make a growth, but there is usually plenty of time before."

The Farm Orchard.

B. F. SMITH, WELLSVILLE, BEFORE THE WELLSVILLE FARMERS' INSTITUTE.

It is scarcely necessary in this age of the fruit-growing industry to go into an argument to show its advantages to the farmer. The fruit itself, and the healthfulness of it is sufficient proof. A treasure is added to every farm, be it large or small, that has an orchard on it. So, this leads me to consider the "Farm orchard and its care." On the size of the farm depends the size of the orchard; a forty-acre farm should have a three- or four-acre orchard; a farm of eighty acres should have seven or eight acres in orchard; and a farm of a hundred and sixty acres should have at least ten acres set aside for the family orchard and small fruits.

The farm home, be it ever so small or large, without an orchard, is unslightly, not finished, is not well balanced. Fruit-bearing trees, vines, plants, and flowering shrubs are among the Creator's best gifts to man for food and home adornment.

The orchard should be located as near the house as possible, for the convenience of the family. It should be fenced to itself, and cultivated annually with the tools best adapted to keep it clean.

As a rule, the farm orchard is the most neglected part of the farm. There is a wide difference in the flavor of apples grown in some old, neglected orchards and those grown in a well-kept orchard. Apples grown in an orchard that has been cultivated five or six times a year are twice the size, and look better, taste better, and sell for better prices. The orchard will live longer and your grandchildren may have the pleasure of eating apples grown on trees set by grandfather, when he was a young man.

I have eaten pears and apples from trees, when a boy, planted by my great-grandfather in Illinois. This matter of

cultivation must not be overlooked, for whatever size your farm may be, there will be seasons when your other crops may partially fail to meet your needs financially, then the orchard may be at its best, and then enable you to keep out of debt.

The farm orchard should embrace: (1) apples; (2) cherries; (3) peaches; (4) pears; (5) plums. While the orchard should all be in the same enclosure, each variety should be set together; they should not be mixed like forest-trees. Plant cherries nearest to the house, and back of the cherry-trees follow with peaches, then with plums and pears; and should you not have time to cultivate all the orchard, you can pass the plum and pear department.

Start head of apple-trees about three and a half to four feet from the ground, and peach-, cherry-, and pear-trees about two feet. Do some pruning every year. Do not allow a thick mass of tangled wood-growth in any orchard fruit-tree. One of the old rules for training the head of peach-trees is to cut off a third of the wood-growth every year for three years. Then after two or three years fruiting cut off the top, then start a new growth of bearing-wood. There should be no vacant places about the farm orchard. When a tree dies, replant the same variety that you lose, no matter what the cause is of the death of the tree. An orchard looks bad when there are great gaps here and there.

Among the crops that are best suited to grow among young trees are potatoes, rutabagas, beans, or any low-hoed crops. Corn, though a hoed crop, is too tall a growth, shading the trees too much.

All sown crops of small grain are bad, grass-seeds are worse, and meadows are ruinous. Repeated cultivation is an absolute necessity, from planting to fruiting.

Even after the orchard is at the age of full-bearing, it should be kept in a full state of cultivation.

There are hundreds of old orchards in the old counties in the Eastern part of this State that are bearing a few poor apples, that could be renovated and renewed with some of the vigor of their youth by cultivating and fertilizing the soil near each tree.

If any of our friends in this association have old orchards, or even a few trees of varieties that are worthy of having a few more years of useful necessity, try the experiment of renovation.

Begin this year by digging narrow radiating trenches five or six inches wide and the same depth, and within four feet of the trunk of the tree, directly out from it several feet. These trunks may be filled with a compost of barnyard and chicken-house manure. It should be done in the fall; but it can be done any time in winter or the spring season, and if we do not have a dry year, you will have a renovated tree ready to bear a revised edition of apples in 1907.

The farm orchard should have a succession of the earliest and the latest varieties of cherries, apples, and peaches, so that the table may be supplied from the beginning of the earliest to ripen to the latest fall apples. But the greater part of the orchard should be winter apples as the farmer has more time to sell the surplus, if he has any over the want of his own family.

In addition to the family orchard, every farmer should have a few grape-vines, currants, and gooseberries, and the best of the berry fruits, a strawberry patch and a raspberry patch. The berry season may be prolonged about six weeks by planting the earliest sort of strawberries and the latest kind of raspberries.

A well-kept orchard including a good-sized family berry-patch will be known through the neighborhood. Your neighbors will be more neighborly and more ready to exchange work, when one needs help. Should the time come when one desires to sell his farm and move to the city or a warmer climate, the attractive orchard and berry fruits will enable him to sell the farm for a higher price.

Many farmers look on the work in the fruit department of their farms as work from which they receive small returns for labor bestowed, but if they will persevere, and try to grow in love for the adornment of their homes, they will discover that the fruit department is a source of profit, not so much in the dollar as in the pleasure it will give their families in noting the growth of the trees, plants, vines, and flowers. It is so different from the ordinary farm-work that the time bestowed on the fruit department will be a season of rest to the body and growth to the soul.

Great American Desert Seeds
are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.
M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1906. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices
GARDEN CITY, KANSAS

ALFALFA SEED

Kansas Grown. Non-Irrigated.
From grower to consumer. Write for prices.
F. D. MORRISON, MEADE, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

We Are Growers of Pure-Bred, Medal-Winning Fire-Dried Seed Corn.

Twenty-five varieties. Will send you one of our new 1906 catalogues and four varieties, two white and two yellow, of what we consider the best for your section, or will send samples of any variety you may desire. MANY FARMERS ARE DOUBLING THEIR YIELD WITH OUR SEED. Our catalogue of farm, field and garden seeds will tell you why this is, and how you can do the same. Sent free on application.

J. B. ARMSTRONG & SON, Shenandoah, Ia.

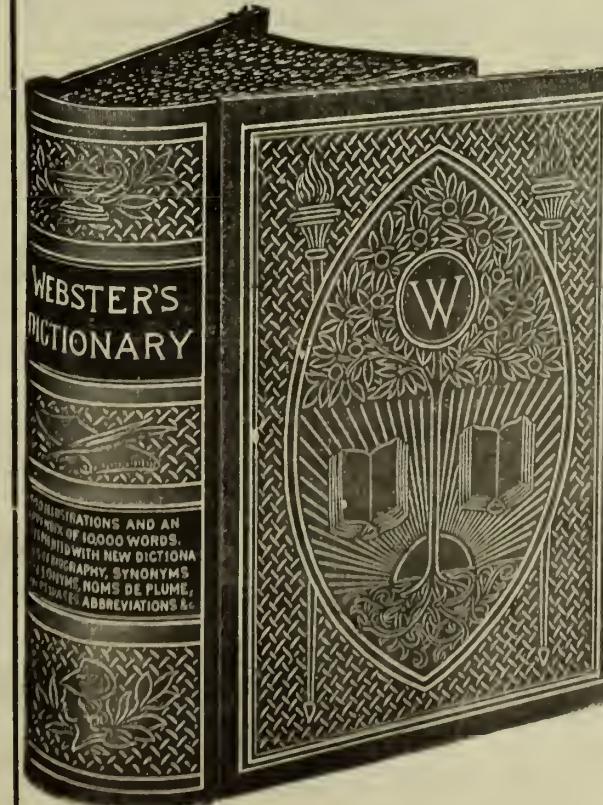
RATEKIN'S SEED CORN

"Pride of Nishna" is a golden yellow, 16 to 24 rows; deep grains and small cob; matures in 95 to 100 days; of great vitality and strength to resist drouth and other unfavorable conditions; outyields any other yellow corn in existence, making from 60 to 100 bushels per acre on good land. "Ratekin's Silver Mine," white, has greatest record for large yields of any white corn in the world—averaging 176 bushels per acre in seven states; full counterpart of Pride of Nishna.

Our Seed all grown from absolutely pure stock, especially for Seed purposes, is carefully selected, sorted, and butt and tip ends taken off, and is all graded to uniform size. Seed corn shelled and graded or in the ear. It is the kind that pays to plant. Change your seed and grow bigger and better crops. Price, \$1.35, shelled, sacked on board cars here. Our big Illustrated Catalog of all Farm and Garden Seeds is FREE if you mention this paper. Write for it today.

Address, RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

OUR GREAT DICTIONARY OFFER.



New Census Edition

Full Sheep Binding

Thumb Indexed

Regular Price, \$9.00

We are now enabled to offer our readers This Great Work and the Kansas Farmer for one year for only

\$2.75

Send Cash or Money Order to

Kansas Farmer Co., Topeka, Kans.

POULTRY BREEDERS' DIRECTORY.

S. C. B. LEGHORN SPECIALIST—Breed 22 years. Utility and exhibition stock or eggs—\$1 per 15, \$4 per 100. Circular free. Gilt-edge Poland-Chinas. A. B. Hoffman, Reece, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY Eggs, \$2 per 15; \$3 per 30. All orders give prompt attention. R. C. Capron, Route 7, Winfield, Kans.

RARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys. \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns, S. Spangled Hamburgs, S. C. Black Minors. Prize-winners in every pen. Eggs, \$1 per 15. Vira Bailey, Kinsley, Kans.

BLUE BIRDS—Parred to the skin. Hawkins' Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyudon, Kausas.

LIGHT BRAHMA EGGS from prize-winning birds. \$1.25 for 15; \$2 for 30; \$2.50 for 45; \$5 for 100. Carefully selected. N. Van Buskirk, Blue Mound, Kansas.

EGGS FOR HATCHING from my flock of purebred P. P. Rocks. Pullets scoring 93; flocks headed by males scoring from 90% to 92%. \$1.25 per 15; \$6 per 100. Incubator orders a specialty. Eggs carefully packed. Address Mrs. Chas. Ainsworth, Eureka, Kansas, Route 1.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Heitlich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale; also a few cockerels. Bertha Gresham, Bucklin, Kansas.

IN ALL THEIR RILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Shibley, Lawrence, Kansas.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94½ to 96%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

PARTIDGE COCHINS—Toulouse Geese, purebred; farm raised. Eggs \$1 per 13 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Langshan eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Bred by W. F. Cox, Clifton, Kansas. Eggs for sale at \$2 per 15.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Kellerman, "Vineyard Farm," Mound City, Kans.

RARRED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

BARRED PLYMOUTH ROCKS—Either cockrel or pullet. Mating pens headed by 9½ to 98 point birds; females 91 to 95%. Eggs, \$2 per 15. Utility pen cocks, 91 to 92%; \$1 per 15; \$5 per 100. Silver Penciled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94%; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners; 15 for \$2; from flock, 100 for \$5. W. C. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 80. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on ekl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 \$3.50. H. F. Brueggemann, Route 2, Herington, Kans.

PURE BRED White Wyandotte eggs for sale; \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94% points. Write for prices. A. F. Hartley, Maple Hill, Kansas.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK EXCLUSIVELY—bred direct from a pen of U. R. Fishel's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

RARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Galbraith, White City, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. R. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

GREAT RIG S. C. RUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandella, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White Buff and brown Leghorns, White, Ruff and Silver-Jaced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE PLYMOUTH ROCKS—12 years breeder of choicest birds. Eggs \$1.50 per 15. Member American White, P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels. \$2 will buy a good one 50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Kans.

THE KANSAS FARMER

The Poultry Yard

Sweet Corn vs. Indian Corn as Poultry Feed.

EDITOR KANSAS FARMER:—Will you please give in the columns of your paper the relative value of sweet corn for poultry feed as compared with Indian corn. FRANK RANDLETT, JR. Elk County.

Answer:—Sweet corn is a more valuable feed than Indian corn for poultry as well as other stock. In an article on relative values of feeding stuff in the 15th biennial report of the Kansas State Board of Agriculture, Professor Cowgill of THE KANSAS FARMER has figured out that in 100 pounds of dent corn there are 7.8 of protein, 66.7 of carbohydrates, and 4.3 of fat, the value of these digestible nutrients being 50 cents, while in sweet corn there are 8.8 of protein, 63.7 of carbohydrates, and 7.0 of fat, a total value of 54 cents. He values protein at 3.37 per 100 pounds, carbohydrates at 0.32, and fat at 0.56. Sweet corn therefore is worth as a feeding material about 4 cents per 100 pounds more than dent corn.

Poultry Notes.

Kerosene is invaluable around a poultry-farm. It is a simple remedy for many troubles. Put it on the roosts frequently; it will keep the lice in check. Dilute it with sweet-oil (about one-third sweet-oil and two-thirds kerosene) and inject in nostrils, roof of mouth, and corners of eyes if your fowls have colds. Scaly legs are cured with it if properly applied, and an internal dose will help in many cases. An easy way to apply kerosene to the legs and feet of fowls to destroy the insects which cause the excrescences which sometimes appear is to fill an empty can two-thirds full of water, pour two or three tablespoonsfuls of kerosene in the water, and dip the feet and legs of the affected fowls therein. Two or three treatments will prove effective.

Hens take on fat in winter when the flock is being pushed along for selling and showing purposes. This retards the early production of eggs and especially of fertile eggs. The proper thing to do is to take off a large portion of their feed, enough to make them hustle to get enough to eat, and gradually work off the extra fat; and after this is done they will lay. After laying is fairly begun, they should be well and suitably fed to keep up the supply.

Millet seed should be a regular diet for the laying hens, and it should be kept on hand and in a convenient place for use. When you go into the yards and the hens run to you for food, which they will do even if fed frequently, scatter millet seed for them and let them seek the seed among straw or hay. Mustard seed, hemp seed, or any small seed will answer: a handful or two of seed is sufficient as it is intended, not so much as a part of the ration, as to keep the hens busy.

Turning the Eggs.

That turning the eggs in an incubator is an essential requisite of incubators is well known, but how to do it is not so clear. Some incubators have patent devices for turning the eggs by simply pulling a slide; others have an extra tray which is placed over the trayful of eggs and by reversing the trays, the eggs are all turned at once. Manufacturers of other machines claim that the better way to turn the eggs is by hand, handling each egg separately so as to be sure that all are turned each day.

Quite an interesting experiment along this line has just been completed at the experiment station of Cornell University. It was recognized that the old hen was a pretty reliable authority on this matter and, for the purposes of experimenting, four hens were set on fifteen eggs each. The eggs were marked by numbering them from one to fifteen, and a chart made of the location of the eggs each day. The results were surprising. In every instance it was found that each egg had been moved during the day. Not only were the eggs turned over every day, but their location in the nest was changed each day. For instance, No. 1 was in the front of the nest one day; the next day it would be in the middle or side of the nest; the next day again it would be in the back part of the nest. The same was true of all the other eggs in the nest. Of the twenty charts furnished for each day, not one of them showed the eggs in the same

position as any other day. This goes to prove that the patent devices for turning the eggs is not sufficient for successful incubation, for they simply turn the eggs over from one side to the other, but do not change their location in the trays. It would seem,

therefore, that the only proper way to turn the eggs in an incubator is to do it by hand, emulating the old hen as near as possible by changing the eggs from the ends and sides to the middle of the tray and vice versa, so as to make a constant change in the position of the eggs. By so doing all the eggs will have an even chance of hatching; for no matter how good the incubator may be, there are different degrees of temperature in it, the central portion and that nearest the lamp being the hotter and the outsides of the tray being the cooler portions. It behoves users of the modern incubator, therefore, to take a lesson in egg-turning from the lowly hen; for however proficient we may have become in the use of this modern invention, it goes without saying that the original incubator was an old hen, and that she knew all about the egg-turning business is fully demonstrated by the millions of progeny she has left behind her, all following the same old method that she taught her children, even unto the last generation. If it had not been done properly, our chickens to-day would have all been ducks.

Training for the Show-Room and Notes About Exhibition Poultry.

It is quite impossible to overestimate the value of the good training of fowls intended for the exhibition hall. For the training of these specimens, coops of the proper size, to conform to the size, shape and general make-up of the pens that are to be used in the show-room, should be selected. In this the fowls should be kept, first for a few hours at a time, and then finally confined therein for a day or two in succession until they become perfectly familiar with living within the coop, and lose all timidity from being confined therein and handled by those who have them in charge.

These fowls should also be taught not to become frightened at the presence of strangers, women, children, dogs, and animals that might possibly visit the exhibition hall where they are to be kept. If you have a lot of exhibition fowls so well trained for the coop that they will scarcely notice the approach of strangers, and will simply look somewhat excited at the presence of a barking dog, you may feel reasonably well assured that the specimens will stand the test of the disorder and surroundings of the exhibition hall.

Considerable trouble comes to those who fail to teach their fowls to stand naturally in the coops and to confront those who approach them rather than to turn from and cower into the corner of the coop. A specimen that will walk boldly up to the judge as he approaches the door of their coop and look at him as much as to say, "Well, here I am for your inspection," wins the admiration and confidence of the judge at once. Those that turn from him and do anything they can to avoid being handled seldom, if ever, gain the much-desired awards.

Teach your specimens that you send to the exhibition hall to be ever ready and on the alert for some one to open the coop door and handle them. Such a specimen is usually designated as a perfectly trained specimen, properly prepared for the examination of the judge and the eyes of the exhibitors. Such a one has many points in its favor, even before a partial examination for quality has been made. The first impression of the specimen in the coop has a lasting influence on the judge so long as he has this specimen under consideration.

For the final finishing touch for the show-room, be absolutely certain that the specimen is thoroughly clean and free from dirt or bad color of any kind. It is always best to thoroughly wash a specimen before it is sent to the show-room. No matter of what breed, variety, or color it may be, it will be greatly improved by a thorough washing. Even though this may not be done the comb and head parts should be thoroughly cleaned with luke-warm water and a sponge, the shanks and feet thoroughly washed and scrubbed with a good stiff brush, so that when the specimen is shown it will be as clean as it is possible to have it. This is called good condition, and nothing counts for more than this in close competition.

When the specimen is taken to the show-room, always see that it is carefully placed in the exhibition coop sev-

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHANS—Hens scoring 93 and upwards—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF PLYMOUTH ROCK EGGS for sitting, \$1.50 per 15. Jay S. Buck, Oskaloosa, Kansas.

BARRIED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.50; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kansas.

WHITE WYANDOTTE EGGS for sale: \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

SILVER LACED WYANDOTTE—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Heaven. Sons. Pure-bred Buff Plymouth Rock eggs, 15 for \$2.30; \$3.50. M. Bronze turkey eggs, 11 for \$3.

CHOICE R. P. ROCK cockerels and pullets. Colle pars: send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns. W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Fr. geese, 20c each. W. African guinea, \$1 per 17. All guaranteed pure-bred. A. F. Huntley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize men Chicago show 1903 and took six first prizes and first men at Newton 1904. Fees \$2 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND RUFF ROCKS—Winners at State Fairs. Fees, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

WHITE WYANDOTTE COCKERELS—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93½ to 95½. \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

RARRED ROCKS EXCLUSIVELY—I off fowl strain. Large, heavy-boned, fine, clear. Barr's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards. John D. Ziller, Hlawatha, Kansas.

WHITE WYANDOTTE COCKERELS, (S. W. White). \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLES-COMB WHITE LEGHORNS cockerels, \$1 each; two or more, 20 cents each. Fine white, pure thoroughbred birds. Also a few Ruffed Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 20 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Meriden, Kansas.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Fees, \$1.50. Cockerels, \$2 to \$4. T. F. Wenner, Blue Mound, Kansas.

Eggs for Hatching

M. R. turkeys, \$2 per 10. Golden Wyandottes, \$2. \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

Barred Plymouth Rocks

Exclusively—"Superior Winter Layer Strain" noted for size and quality. Seventeen years of careful breeding. Fees 15 for \$1; 20 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns

EXCLUSIVE! Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots. P. H. Mahon, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ INC., KAN.

Pure stock, 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm raised. Have no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. W. O. MAGATAGEN, BAPTIE, KANS.

Mention KANSAS FARMER when writing.

Sixteen for \$1.50

Eggs from pure-bred stock. Barred Plymouth Rocks, White Wyandottes and S. C. R. Leghorns. Ten years in the poultry business. Address Mrs. E. L. Lindner, Clay Center, Kans.

S. L. Wyandottes

POULTRY BREEDERS' DIRECTORY.**White Plymouth Rocks**

Scoring 95 Scored by Rhodes
Eggs from selected pens, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Ida Meler, Route 2, Lincoln, Kansas.



15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas. Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. C. MILLER, Breeder.
Stock for sale. Fifteen eggs for \$2. Address 546 Missouri St., LAWRENCE, KANS.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4.

S. C. Buff Leghorns, S. C. Buff Orpingtons

Jumbo Squab Pigeons (Useful Pigeons)
Our catalog tells prices, prizes and quality. Send for it to-day. W. H. Maxwell, 1220 Quincy, Topeka, Ks.

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—
Fine stock; farm raised. Price, \$1 for 15; special price by the hundred. Shipped by express, carefully packed, anywhere. Mrs. O. E. Walker, Route 8, Topeka, Kans.

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet; 2, 4, 5 cockerel. Young cockerels for sale. Eggs, \$1.50 to \$2.50 for 15, from high-scoring pens.

R. B. Steele, Sta. B, Topeka, Kans.

ACME CHAMPIONS Bronze turkeys. Show Champions, Topeka and St. Joseph, winning ten 1st, three 2nd, two 3rd prizes; only 7 birds entered. Barred Rocks, 1st, 3d hen, Topeka, 93½, 92½, 5th cock 90½, 4th pen St. Joseph, 24 hen 92½, 3d cock 91, own 2d cockerel, 93½. Eggs, \$3 per 15; \$5 per 30. M. B. Turkey eggs \$1 each. Cockerels for sale. Pullet breeders specialty. Mrs. W. B. Popham, R. F. D., Chillicothe, Mo.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR,
Glendale Park, Hutchinson, Kans.

Rose and Single Comb White Leghorns and White Wyandottes.
IN ALL THEIR PURITY
Unsurpassed in every respect for beauty, utility and winter layers. At State show the largest in the United States, just held at Topeka Kans. 26 prizes were awarded me. Write for my catalogue, giving prices on stock and eggs.

W. S. YOUNG, McPherson, Kans.
When writing mention this paper.

INCUBATOR EGGS

From high grade White Rocks and White Wyandottes.

\$3.00 for 50, \$5.00 per 100

SEND FOR CIRCULAR.

W. L. BATES, Topeka, Kans.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants. 1: : : : :

A. H. DUFF,

Larned, : : : : Kansas

At Topeka 1906

Our Buff P. Rocks won all shape and color prizes awarded. Our first prize pullet scored 94 (cut 1 for injured eye). Our winning Houdans, White Plymouth Rocks, and White Wyandottes, are the same quality. We have very fine S. C. B. Leghorns. Judge Helmich cut our White Rock cock ¾ of a point for color of entire bird. Eggs from pens we hatch \$2 per 15; \$4 per 100. Standard Poultry Yards, Abilene, Kans.

White Plymouth Rocks
EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96½, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expense to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kans.

When writing advertisers, please mention this paper.

oral hours before it is to be judged. It is best to coop, water, and feed them the night before. Give them plenty to eat and drink at this time. Then, if they are to be judged in the morning, do not feed or water them any more until after they have been judged.

The time to begin to prepare for the exhibition hall is as soon as the young chicks commence to run about. Carefully look them over and examine them so as to become familiar with their contour and make-up. As the feathers begin to grow, the color and markings will quickly tell those of experience what the prospective qualities of those young chicks are, and by giving special care and attention to the best of them you will grow to maturity a lot of young fowls that will prove to be much better than they would have been if allowed to continue to go on in one flock, all receiving the same attention.

To make a show winner is not the work of a few days or weeks prior to sending them to the exhibition hall. It demands a series of long months of care and attention to bring them to the finest finish, and grow them to a proper size, strength, and muscular conformation that is demanded for the best. The present demands of the show-room do not accept medium quality as the best, so it is absolutely necessary to commence early in the game to make next winter's exhibition fowls.

Those who succeed never allow the grass to grow under their feet, as the saying is, but are continually on the watch to have and maintain a flock of exhibition fowls throughout, so that from year to year everything they possess is of that quality which makes the blue-ribbon winners. They never neglect the least or most simple thing they can do that adds to the comfort, growth, and handsome plumage of their stock. This is the price that must be paid for quality. The best of quality can not be had in any other way. If you desire to be successful in the show-room, gird on the armor of determination and continued efforts to have them as they should be.

The selection of the best is a problem that confronts every grow of standard-bred poultry. In the first place, the one who selects must be thoroughly conversant with the demands of the exhibition hall and the pranks and self-opinions of the judge, if you will. But above all things remember that you must be almost if not quite as expert at selecting the best before you leave home, as will be the judge who will pass upon them when they reach the show-room.

It is never too soon to begin the proper feeding of the specimens intended for the exhibition hall. These may be frequently chosen when between six or eight weeks old, providing the eye and experience of the selector is equal to the occasion. Such ability only comes after long experience. The reason that the older breeders are the most successful in the exhibition hall is because they have studied the problem, and improve by their experience gained through hard knocks and long-continued care of their poultry at home and in the exhibition hall.

Often we are tempted to select but a few in preparation for the exhibition hall. It is better by far that you should select all the likely specimens at first and colonize them to themselves, and as they improve and grow older, select those of the poorest quality and ship them off for the filling of orders. This will leave in your possession the cream of all you have grown that season, and it is never a difficult problem to sell the best; never be in a hurry to do this, for if you will succeed as an exhibitor and breeder the following season you can not possess too much of the highest quality for your matings from which to grow your future stock.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals à la carte. Ask for tickets via the Nickel Plate Road, Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

THE KANSAS FARMER

The "QUEEN" is not an incubator but the Incubator

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA



NEW and RECENT POULTRY BOOKS

The New Egg Farm

By H. H. Stoddard. A practical, reliable manual upon producing eggs and poultry for market as a profitable business enterprise, either by itself or connected with other branches of agriculture. It tells all about how to feed and manage, how to breed and select, incubators and brooders, its labor-saving devices, etc., etc. 140 original illustrations, 331 pages, 5x7 inches. Cloth.\$1.00

Turkeys and How to Grow Them

Edited by Herbert Myrick. A treatise on the natural history and origin of the name of turkeys; the various breeds, the best methods to insure success in the business of turkey growing. With essays from practical turkey growers in different parts of the United States and Canada. Illustrated, 154 pages, 5x7 inches. Cloth.\$1.00

Poultry Architecture

Compiled by G. B. Fiske. A treatise on poultry buildings of all grades, styles and classes, and their proper location, coops, additions and special construction; all practical in design, and reasonable in cost. Over 100 illustrations. 125 pages, 5x7 inches. Cloth.....\$0.50

American Standard of Perfection

A complete description of all recognized varieties of fowls, as revised by the American poultry association at its twenty-eighth annual meeting. It contains all changes in and additions to the constitution and by-laws, and the text of the standard, as authorized to the present time. Illustrated 300 pages, 5 1/2x8 inches. Cloth, net....\$1.50

THE KANSAS FARMER CO.

Topeka, Kansas

POULTRY BREEDERS' DIRECTORY.**CHICK FEED**

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co.

Wichita, Kansas

\$12.80 For 200 Egg INCUBATOR
Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day.
GEO. H. STAHL, Quincy, Ill.

LIFE PRODUCERS
SUCCESSIONAL INCUBATORS.

The only machines that rival the mother hen. Incubator and Poultry Catalogue FREE. Booklet, "Proper Care and Feeding Small Chicks, Ducks and Turkeys," 10c. 60c poultry paper one year, 10c.

DES MOINES INCUBATOR COMPANY, Des Moines, Iowa.
Department 83

Take Your Own Time.**Old Trusty Incubator**

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and no good chicks—why it is no good incubator—why it is so economical. It is sold on 40, 60 or 90 days trial, freight prepaid. Write to us.

M. M. Johnson Co., Clay Center, Neb.

**BEE SUPPLIES**

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

Topeka Supply House

7th and Quincy, Topeka, Kansas.

SCOTCH COLLIES.

SCOTCH COLLIES—Scotch Collie pups from registered stock for sale. Emporia, Kennels, W. H. Richards; V. S., Emporia, Kans.

SCOTCH COLLIE PUPS for sale, \$4 and \$5 each. Pedigrees furnished. G. B. Gresham, Box 102, Bucklin, Kans.

Hatch - All Incubators

They save worry. Help you make more money. Strong, durable. Even heat, pure air, simple to run. Beginners get big hatches. Write us for proofs and learn to add to your income. Handsome catalog free. HEIRON INCUBATOR CO., Box 18, Hebron, Neb.

Our Money-Back Guarantee

Every incubator we sell absolutely money-back guaranteed to do all we claim. The Hatch - All is the only incubator with double heating system. Free catalog tells all about it. Pure-bred Poultry and Eggs for hatching. Ask for prices.

Reliable Incubator & Brooder Co., Box B-62 Quincy, Ill., U.S.A.

NEW BOOK**JUST ISSUED****SUCCESSFUL FRUIT CULTURE**

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD,
Formerly Professor of Horticulture at the Massachusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, strawberry, blueberry, huckleberry, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most recent methods of the present day, and is the most recent practical treatise on this important industry.

Illustrated. 5x7 inches. 265 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA, KANSAS

Dairy Interests

Developing a Cow.

When we stop to think that all kinds and breeds of cattle undoubtedly originated from the same pair that the good Lord created at the beginning, we begin to realize what an artificial production the cattle of to-day are, how that environment, conditions, and tastes of men have developed them along different lines, until to-day we have many different breeds with characteristics peculiar to each breed, and each breeding true to the type, color, and conformation of its own peculiar breed. Of course this was the work of ages, and requires a great deal of skill, patience, and perseverance; but it shows what can be accomplished if we have a definite aim in view.

Cows, like men, are good or bad oftentimes because of their environment, bringing-up, and education. We look for and expect men to be good if brought up in good and religious families and communities. I have often heard it said, "give me the first six years of a child's life and I will tell you with a certainty what the future of that child's life will be." So I believe that the conditions under which an animal is reared determines in a large measure her future usefulness or uselessness.

As with men the parentage is of great value and we look for and have good reason to expect cows to be better cows from a long line of productive ancestry, so this then is the stepping-stone in the developing of a dairy cow.

A profitable cow in my estimation is one that can produce in a year, or still better a series of years, a good maximum yield of butter at a cost that will yield a good profit to her owner and also produce a strong healthy calf each year. One of the requisites then in securing the sire for the head of the herd is not only to see that he is from a productive strain, but from a family of regular breeders also, because he not only reproduces his good qualities, but often intensifies his weak points as well. See that he is as near perfect in conformation and dairy makeup as possible, for with all the care we may exercise in the mating of our animals, some faulty ones will develop that we had not figured on; so if we have looked well to this end, to see that the sire is right, and that the dams we are to use for foundation are right, we have gone a long way toward their development.

I recently heard of a breeder who examined every little heifer calf that came into the herd and if it did not have so many developed teeth and the udder and teats just so well developed, it was knocked in the head. I want to say that if we had practiced such a method in our herd, we should have slaughtered some of our most valuable animals, for we have found that all heifers do not develop alike; some are veritable little cows at six months old, while others do not develop real good cow-qualities until three or four years of age.

Calves should be fed in such a way as not to impair their early growth or digestion for later on we are going to ask them to take care of a lot of feed so that they may develop and be profitable animals; but if fed and cared for in a careless and harmful manner, their digestive faculties become impaired and they simply say "We can't do it."

I still believe that heifers should not freshen too young; if allowed to drop their first calf at from twenty-eight to thirty months of age; they will get a little more growth and strength and we believe their digestive abilities are also strengthened.

There are many things that enter into the development of the dairy cow, and possibly if any one was dropped out the best of results could not be obtained. The man that uses that part of his body above his ears the most freely usually succeeds best.

We have come to believe that a large part is due to the feed end of the question; the organs of digestion, like the other organs and muscles of the body, are developed best by constant use. The breeder that through neglect has not provided in some way for the emergencies that always come is shortsighted. We all know that when a cow once shrinks in her milk how hard it is to get her back, and quite often it is impossible even with the best of feed; so it stands us in hand to provide in some way for these times and either have some soiling crops growing or enough silage stored up to supplement the short pasture of summer, also to

supply succulent feed for winter use.

I believe there is such a thing as compelling success. Every breeder should have such a complete understanding of his business and the individual needs of each animal, that there is no time in the year when she may not have an abundance of good, rich, juicy foods, best suited for milk-production.

The successful development of cows rests largely on the breeder's equipment. Loretta D's, Yeksa Sunbeams or Shadybrook Gerbans do not come by "happenstance." They are the result of equipment. The important requisites for the developing of a good dairy cow are (1) right breeding; (2) right feeding; (3) right care.

One man in writing of cows says: "The cow does not make her milk from running brooks or sunny skies." To be sure she does not, yet I believe the water and the sunshine are quite important factors in the best milk-production. Convenience for watering and at the right temperature means something, and the pleasantly situated cow-stable with plenty of windows for the sun to shine through means something; good, warm, clean, well-ventilated stables, balanced rations, kindness, patience, watchfulness, "sticktoitiveness," all mean something.—F. H. Scribner, Rosendale, Wis., in Jersey Bulletin.

Location of Barn and Care of Yard.

In the production of clean milk, no one thing is of more importance than keeping the cows out of the mud. Many yards into which dairy cows are turned each day for their drink and exercise are knee-deep with mud and manure during the winter and spring, if not nearly the entire year. In summer when the cows are on pasture, they would keep comparatively clean were they not obliged to wade through a filthy yard in going to the stable.

In locating a dairy-barn care should be taken to have a gentle slope from the barn in at least one direction, affording good natural drainage for both barn and yard. If the barn is already built and poorly located, drainage and grading will do much to remedy the evil. In most cases it would take but a small amount of labor with plow and scraper, when the ground is in suitable condition to handle, to give the surface of the yard a slope from the barn sufficient to carry off the surface water. Even if dirt has to be hauled in from outside the yard to accomplish this, it will not be expensive. Tile drainage alone under a yard is not sufficient, as the tramping of the cattle soon puddles the surface, preventing the water from passing down to the tile.

After the grading is done, the yard should be covered with gravel or cinders. By putting the coarser in the bottom and the finer on top, a good hard yard can be obtained and at a comparatively small expense where material of this kind is available. If this can not all be done in one year, it is of the utmost importance that a beginning be made by grading and graveling a portion of the yard next the barn, so that the cows may have some place on which to get out of the mud and filth. By grading a part of the yard each year and applying a thick coat of gravel or cinders to the graded part, the entire yard will, in a few years, be in good condition. When gravel does not contain enough clay to pack hard, a small amount of clay should be mixed with the top layer. It will then form a firm surface.

A portion of the yard should be bedded, thus affording the cows a place to lie in the open air on pleasant days. If straw is scarce, the cleanest of the soiled bedding from the stable will answer this purpose. When the straw and manure on this bedded portion of the yard become too deep and soft, they should be hauled into the field and the bedding commenced again on the solid yard.

It is advisable to haul the manure directly to the field from the barn, but if this is not feasible, it should be removed at least 100 feet from the barn. In no case should it be allowed to accumulate against or near the dairy-barn, and no swine-pen should be nearer than 200 feet on account of the odors being readily absorbed by the milk.

W. J. FRASER.

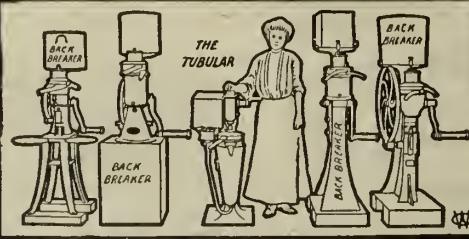
Western Farmers and Western Butter.

The time was when Western butter had a poor place in the market. Gathered cream butter was often pretty poor stuff. Methods of manufacture changed, and the time was when Western butter commanded top price. This was when the farmer brought the whole sweet milk to the factory and the operator made the cream as well as

TUBULAR--or "Back Breaker?"

When you see the waist low Tubular you can't be driven into buying a back-breaking, "bucket bowl" separator. **Can and crank are just the right height on the Tubular.** Here is the largest Dairy Tubular along side four "back breakers." The girl with her hand on the Tubular is 5 feet, 4 inches tall. This is an exact reproduction from a photograph. **Which kind for you?** Makers of "back breakers" try to get their cans low by setting the cranks low. **High cans** break your back backward—**low cranks** break it forward. Unless you are a double jointed giant, you'll find a high can is no joke. To show you how high these "back breaker" cans really are, when the machines are set high enough to turn easily, we raised these "back breakers" 'til their crank axles were level with the Tubular crank axle. "Back breaker" makers don't like this picture—it's too true. They try to squirm out of it. You wouldn't like turning cranks as low as "back breaker" makers put them.

The low can is only one of many advantages Dairy Tubulars have over all others. Dairy Tubular bowls are simple—"back breakers" are complicated. Tubulars are self-oiling—no oil holes to fill up. "Back breakers" are oil drippers and oil wasters. To learn a lot more about Tubulars, write today for catalog N-165.



The
Sharples Separator
Company
West Chester, Pa.
Chicago, Ill.
Toronto, Can.

Cream is Cash

AT

The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business. Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in **Cash**.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.

Peerless Cream Separators

Reasons Why the PEERLESS is the Best

1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.

3rd—Enclosed frame. Free from dust. Injury resulting from machine impossible.

4th—Perfectly noiseless.

5th—Heavy enough and strong enough to lift a box car, which insures durability.

6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-1000 of an inch.

7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.

8th—at normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter fat, and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

BRADLEY, ALDERSON & CO.,
Tenth and Hickory, KANSAS CITY, MO.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

G. F. Strickler

TÓPEKA BUSINESS COLLEGE, Topeka, Kans.

the butter. Now, the time is when the buyer wishes to be shown the goods if they are from the West. There is no dodging the fact that a very large per cent of the butter made in our Western creameries is poor, poor because the cream from which it is made was poor. Seeing this, it has been the pleasure of many writers to take a whack at the farmer, holding him responsible for all this trouble and loss. The truth of the matter is, the separator agent and the creamery managers are more to blame than the farmer for the poor cream that the farmers send in.

There is no question about the hand-separator being an economical instrument for the farmer who sells cream. So long as this remains true there is no use in trying to keep him from using one. Neither should we try, for anything which makes more money for the producer will encourage him to stay in the business. This insures continuance of work for the manufacturer and greater business. Moreover, it is both theoretically and practically possible to make just as good butter from hand-separator cream as from power-separator cream. Yet the fact remains that such good butter is not usually made. The farmer has been scolded and thoroughly "lambasted" for not taking better care of his cream, with what result? Poor cream continues to come, and bad butter continues to go.

The hand-separator agents who have taught and are still teaching the farmers that once or twice a week is often enough to wash their particular make of machine should be the first men laid out, and with them the company they represent for allowing them to do this thing which in most cases is against the orders of the house. So much has been said on this point and the agents themselves know the truth so well that I was surprised at learning from one whose word can not be questioned, that at the implement dealers' convention, at Kansas City, Mo., this company was heard to tell a farmer that his machine was "washed with the crank." We all know, and he knew, that any and all machines or tools used about milk must be well washed if first class goods are to be produced, or, in any other words, this man then and there sold his honor as an honest man for the price of his commission on a cream-separator. For a temporary personal gain he jeopardizes the whole industry. Is it not al-

most time the State dairy inspectors were placed on the trail of these men, and at least publicly expose them and their company when such criminal nearsightedness is practiced. Their teaching is more filthy and a greater source of evil than the farmer's dirty barn.

The second man to be slain is the creamery manager, for he, though howling most lustily, is, after all, the chief offender. He lies in accepting at first-class prices cream which no mortal man could make into good butter. In fact, the competition among the creameries of the West has been too keen for the permanent welfare of any, even the producers. During the past two years their mad chase for more business has led all to take any old stuff named cream and, what is worse, pay a good cream price for it. There is in man a trait which keeps him from putting into any article any more work than is necessary to get the price out of it, and why should he? Last summer the creamery companies sent out personal appeals and instructions by the car-load to the farmers to take better care of the cream, but to no use.

In a little town in Eastern Kansas one day last summer a farmer brought in a can of ideal cream. This man was well known as a neat farmer. While he stood there talking to the station operator a slovenly, unkempt, dirty farmer came in with some cream as badly off flavor as himself; one cream was fit for the table and one fit for the sewer, yet the same price was paid for each. One man went away contented in his dirt, and the other rightfully disgusted.

Inspection is often recommended and it might do some good, but in my opinion such inspection should not be made. The people who buy the goods should do their own inspecting and grading. When the farmer sells smutty wheat or musty corn or scabby potatoes or rusty apples or stale eggs, he gets a price according to the value of goods delivered, and this without any official inspection.

Healthy competition to keep up prices is a good thing, but a warlike competition to get stuff at any cost may prove worse than no competition, even to the producer. If quality has value, as we all know it has, it should be paid for. It is now up to managers of the creameries, both large and small, to grade cream in fact as well as in words, and make a good substantial difference between first-grade and second-grade stuff. When the creameries thus give backing to their own words concerning the value of better cream, the farmers will give that extra care necessary to have good cream. A difference of four cents per pound fat between first and second grades and two cents between second and third grades would seem to be just and have the desired effect.

All creameries, both large and small, should agree to live up to these or some similar rules, and then do it. Western butter is now standing trial; the creamery managers are the jurors who will decide its fate.—R. M. Washburn, State Dairy Commissioner of Missouri.

GALVANIZED IRON SILEO.

EDITOR KANSAS FARMER:—I am a subscriber of your paper and consider it worth more as a farm paper than any I have ever taken.

I am starting in the dairy business and need all the advice I can get. I have 25 head of cows, which number of course necessitates a large quantity of feed. Since receiving your paper and reading the favorable discussion on silos, I have decided to make one to use principally in storing alfalfa hay.

As lumber is very high at present I feel as though it would cost too much to experiment with it, so would ask your advice about using galvanized iron—about 22 inch iron—which I can obtain for 3½ cents per pound. A silo 16 feet in diameter and 20 feet deep will cost about \$60 if I do my own work.

Do you think if I put three coats of paint on the inside that the ensilage would effect the iron? Would also like to know whether alfalfa has to be chopped up to put into a silo? Also what make of gasoline engine would you advise for general farm use?

Would be pleased to receive a bulletin on dairying. P. M. FORD.

Leavenworth County.

Three coats of paint on the inside of the galvanized iron will prevent it from rusting or corroding as long as the paint lasts. Care must be taken in filling the silo to prevent scraping or rubbing, the inside of the silo should be inspected, and whatever particles

DE LAVAL LEADS IN SEPARATOR IMPROVEMENTS

As the first original centrifugal cream separators the DE LAVAL machines have led in every stage of separator improvement and development. From year to year DE LAVAL leadership has been strengthened until today manufacturers of other separators are compelled to constantly create new "talking" points for their machines or else go out of business. First one and then another advertise some new and wonderful "improvement," or else perhaps some asserted to be entirely "new" machine is placed on the market. A close investigation, however, soon discloses the fact that these "improvements" are but schemes to bolster up a failing business and further catch the inexperienced buyer. A few hundred machines are sold on the strength of such claims, but their purpose is soon found out, and then we find the same manufacturers again advertising some other "new" and wonderful but equally worthless "improvement" with which to attract the unwary buyer. Hence it behoves the inexperienced buyer to investigate well before selecting a separator. The 1906 DE LAVAL machines are even further ahead of all others in mechanical construction than ever before. Their skimming is absolutely complete, their capacities are greater, they turn easier, and their lasting qualities are beyond comparison. A DE LAVAL catalogue, gladly sent upon request, will best explain the WHYS and WHEREFORES of DE LAVAL superiority to other separators. Send for it to-day.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,

CHICAGO.

1218 Filbert Street.

PHILADELPHIA.

9 & 11 Drumm Street.

SAN FRANCISCO

109-113 Youville Square

MONTREAL

74 CORTLANDT STREET,

75 & 77 York street,

TORONTO.

NEW YORK.

14 & 16 Princess Street

WINNIPEG.

Dairy Talks by the EMPIRE Dairy Maid



How Much Ought You Spend

Each Year For Separator Repairs? Well, It All Depends

upon what separator you buy.

A complicated separator, with many intricate parts and a lot of do-funny fixin's costs more for repairs than it is worth. A cheap, poorly constructed separator—made for sale rather than service—not only gives a lot of trouble and annoyance, but also is a constant drain upon your profits.

Isn't it foolish to buy any separator until you are sure it won't eat up all your profits in repair bills?

Of course it is. But, if you keep cows, you must have a cream separator—just as you must have a plow on the farm and a cook stove in the house.

The thing to do is to use good business judgment—in other words, plain common sense—in selecting your separator.

What is it that makes trouble in machinery of any kind?

Why, intricate, complicated parts. It's

EMPIRE CREAM SEPARATOR COMPANY, BLOOMFIELD, N. J.

311 TEMPLE BLOCK, KANSAS CITY, MO.

A Dollar Game Free

For postage. Send eight two-cent stamps and tell how many cows you keep and what you do with your milk and we will send you the "Game of EMPIRE Success"—the most amusing, attractive and fascinating game ever invented. Old and young can play. Illustrations of fun for all the family. Handsomely lithographed in colors; mounted on heavy binders' board 12x16 inches.

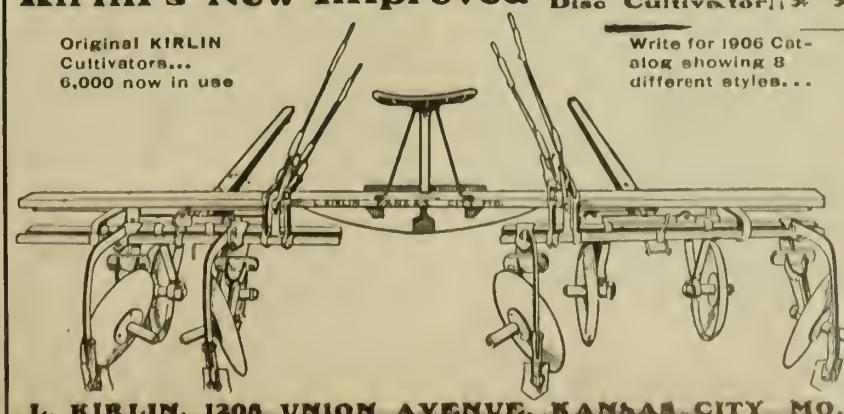
Get the Empire Books.

- Ask for the one you want.—
1. Full catalog and price list.
2. "The EMPIRE Dairy Maid."
3. "The Switching of Illrami, (story.)"
4. "Figger it Out for Yourself."
5. "A Gold Mine for Butter Makers."
6. "Dairy Results—Dollars."
7. "Money and the Way to Make It."

Kirlin's New Improved Double Lever Tongue Disc Cultivator

Original KIRLIN
Cultivators...
6,000 now in use

Write for 1906 Catalog showing 8 different styles...



L. KIRLIN, 1206 UNION AVENUE, KANSAS CITY, MO.

Cleveland Cream Separator

Direct to You
30 Days Approval Test

Easy Running:—In the Cleveland Separator this isn't an empty claim. The whole thing is summed up in an honest, easy to prove reason. The Cleveland is the only ball-bearing separator made.

Easy Cleaning:—The Cleveland has fewest parts: a skinning device is made of aluminum. Investigate. You will find this metal is non-corrosive, non-poisonous, milk cannot stick to it and there is no coating to wear off. We prove these things.

Long Life:—The Cleveland has the fewest parts of any separator made and gets results at the slowest speed. Parts can't wear out that are not there. The Cleveland is a guaranteed perfect Skinner.

How We Sell:—To you from our own factory. The only manufacturers making a high grade separator and selling it at a fair, square price and a fair, square plan. No money in advance. No note to sign. No fine of any kind. The catalog tells you. Write for it.

THE CLEVELAND CREAM SEPARATOR CO.
Dept. B, 34 Michigan Ave., N. W.
Cleveland, Ohio.



FOR SALE

At a bargain, one Davis No. 2 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

of paint have been removed, fresh paint should be applied. Alfalfa should be run through the feed-cutter the same as corn or any other grain before putting into the silo. It will then pack much better and exclude the air, which is an important factor in the preservation of ensilage.

We have used only two gasoline engines at the Experiment Station, and both have proven very efficient. One is manufactured by the International Harvester Co., and the other, the "Eli," is manufactured by the John Deere Plow Co. I am sending you a bulletin on dairying.

C. W. MELICK.

Milking Machine a Success.

The writer had the pleasure of viewing the working of a milking-machine erected on W. B. Barton's farm in Dalton, Mass.

This plant, as well as another erected on the farm of S. A. Hickox, of Williamstown, has been erected as a demonstrating plant in this section. It is stated that there are now more than 200 of these machines in use in the large dairies of New York State.

The territory of Massachusetts has been assigned to local parties who are soon to incorporate. Dalton, Mass., has the honor of being the demonstrating point of the first successful milking-machine ever used in New England.

I arrived at the farm when the milking-machine was about to be started. The power used is an International gasoline engine, three-horsepower (although this is in excess of power required). A pipe-line is put up above the stanchions over the cows. From this pipe a rubber tube is attached to a small instrument on the lid of the can, which causes the pulsations of suction similar to the action of a calf sucking. The milkers work very rapidly, and if proper sized teat-cups are used to fit the different sized teats, it does the milking very thoroughly. I personally stripped two cows after they had been milked by the machine, and did not get any more milk than would be gotten after any milker by hand. With such a plant one man can milk from 30 to 40 cows an hour.

The washing arrangement is very simple; the same rubber tube used in connecting milkers with the suction-pipe is attached to a suction-pipe in the wash-room. The teat-cups are held first in cold water, and then in scalding water, and by the same action that does the milking the water is sucked through the tubes into the can, thoroughly cleansing and sterilizing every part.

If the machine can be placed on the market at a reasonable cost to the dairyman, it is bound to work a great revolution in the dairy business, as it is getting more difficult to get help with the patience and cleanliness necessary in dairying. The milk extracted by the machine is absolutely clean as there is no way in which dirt or even odors can contaminate it, as the milk from the time it leaves the udders is held in air-tight cans until it is carried to the milk-room to be aerated. I have every confidence that this machine is a success.—John B. Watson, Becket, Mass., in Jersey Bulletin.

The Book You Want.

Every owner of a milch cow should send to-day for a little book, "More Milk Book," issued by the Omega Separator Co. It answers hundreds of questions about the dairy which will be of interest and value to you, such as How to keep odors from milk.

At what age the cow is most profitable.

How to make the best butter from separator cream.

How to care for separator cream. How to wash butter for best results. How to score butter. What makes white specks in butter. How to get the most profit from skim-milk.

What cream-separator will give you the best results.

In writing for this book, kindly tell how many cows you milk, and whether you have a cream-separator or not. Address, Omega Separator Co., 18 Concord St., Lansing, Mich.

Catching Pickpockets.

The Sharples Separator Co., of West Chester, Pa., has a man in almost every town who makes it his business to catch pickpockets. Strangely enough, these pickpockets are always caught robbing themselves—and are always farmers or dairymen. The Sharples Separator Company's men do not send these convicted self pickpockets to jail, but show them how to make more money. They prove to them that, if they have not a famous Sharples Tubular Cream-Separator, they are picking out of their own pockets one-third to one-half the profits they should make from their milk—that they are, in fact, losing one-third to one-half their cream. These men can convict you of robbing yourself. They will do it, either by lending you a Tubular for a free trial, or by skimming for you, free, a batch of milk you have already skimmed with pans or cans, and taking out of that milk, which you think is skimmed clean, the cream you have left in it. This proof won't cost you one cent, but will help you increase your butter money from one and one-

third to double what you now make. All you need do, to find out how much cream your pans or cans lose, is to borrow a Tubular from the agent for a free trial, or take a batch of skimmed-milk to the nearest Tubular agent. The result will surprise you, cost you nothing, and put money in your pocket. We suggest that you write The Sharples Separator Co., of West Chester, Pa., about this, at the same time asking them for Catalogue No. N-165.

Dairy experts keep careful records of the performance of each cow. Many have realized the want of suitable blanks for this purpose. A Shawnee County dairyman has prepared and had printed a blank for a herd of 25 cows for one week. At the end of the week another blank is substituted. If one has only 5 cows the blank will answer for five weeks. THE KANSAS FARMER has a supply of these blanks on tough writing paper. They will be sent postage prepaid at the following prices:

One copy, 5 cents; six copies, 25 cents; twelve copies, 40 cents; twenty-five copies, 75 cents; fifty copies, \$1.25; 100 copies, \$2.00.

Miscellany

On to California.

The great opportunity for permanent investment that has promise of good profit is assured by the possibilities of irrigation. The most prominent institution in the United States at the present time is the Fresno Irrigated Farms Co., who have done some forceful advertising in THE KANSAS FARMER during the past few weeks, presenting some of the most striking advertisements that ever appeared in a farm journal in the line of realty advertising.

This week they offer some exceedingly attractive inducements to our readers who will inform themselves on the subjects mentioned in their page announcements. The prizes offered this week aggregate in value \$1,325.00. The first prize article will be published in this paper. THE KANSAS FARMER representative who is personally familiar with this prospect, says: "I am able to state to you that the parties interested in the Fresno Irrigated Farms Co. are of the very highest financial and personal standing in California and they will absolutely carry out the provisions of this competition."

Early Spring Work.

Conditions in a general way are very favorable for another bumper crop all over the semi-arid West, providing man does his part in utilizing these conditions.

Nature has been very kind to us for some time. She may conclude, however, that we do not appreciate her liberality and place us a little more on our resources, in which case it would stand us in hand to husband her bountiful gifts when possible. Our soils as a rule are now filled with moisture to a liberal depth; in short the greater part of the farm lands of Nebraska and much in adjoining States has now (March 6) sufficient moisture stored below the surface to guarantee or assure a good yield of winter wheat and an average crop of corn in face of the repetition of any drought we have ever had, if the farmer will but husband this moisture as he should and can do, together with the proper fitting of the soil and care of the crops while growing.

We are well aware that many a skeptic may read this and say "impossible." Nevertheless, we know we have not overdrawn in the statements. A quarter of a century of careful study and observation and experiments in many parts of this country have proved this over and over again.

The first step to accomplish this all-important result is to get over the surface of your fields with disk, Acme, or common harrow at the earliest possible time and thoroughly loosen it, forming a soil-mulch, for three reasons or purposes: to stop the evaporation of moisture, to prevent the forming of a crust, and admit the air into the soil below.

A few people are beginning to realize to some degree the importance of this work, not that they know just what the effect is or just why the yield is so materially increased, but they have seen the result through practical demonstrations. But we must leave the "why" out of this article, as space will not permit.

Your winter wheat-fields should be harrowed, for the above reason. Most fields of wheat are now too thick by 50 to 100 per cent and should be thinned to some degree. In such a case and where the sub-surface or root-bed has been fined and firmed in the fitting for the crop, the harrow should set fairly straight, that it may do good to the surface. In case the seeding has been late and the subsoil is more or less

HE ATTENDS TO BUSINESS

who goes straight to work to cure

Hurts, Sprains, Bruises

by the use of

St. Jacobs Oil

and saves time, money and gets out of misery quickly.

It Acts Like Magic. Price, 25c. and 50c.

loose and the plant less strongly rooted, then more care must be given as to the slant of the harrow-teeth and the severity or depth of loosening.

One statement may be sufficient to direct the farmer to quite a degree in this work, viz: Use every precaution possible to have the surface of your soil in your small-grain fields free from crust and with a loose mulch when the foliage or leaves of the small grain reach that stage of growth where they cover the surface.

DISKING.

Disk your ground early, especially that portion you expect to put to corn. To the average farmer who has not given thought and study to this question it may seem like a waste of time to double-disk a piece of ground six to ten weeks before planting time, but this is of vital importance, not only for the purpose of holding the moisture now in the soil, but to utilize the effect of the warm days in early spring. The soil beneath a loose surface becomes warm much quicker than if left crushed. The warming of this soil is very important in two ways. The first and most important advantage is the development of bacteria and nitrates, which require both moisture and heat. The second is the warming of the soil so that we may promote rapid, healthy germination of the seed when planted. One point we can not put too much stress upon, and that is to never let your soil dry out. We frequently hear people talk of the soils being very fertile. What is the advantage of owning fertile soil and then persist in so handling this soil that the fertility is never available? Pardon the assertion, but this is really what the average farmer does, and the most serious of all things is to let the soil dry out or become dried to that degree that the development of nitrates or bacteria ceases. The next most serious idea is to allow a crust to form on the surface and shut the air from below. Much has been said about breaking the crust or preventing it forming by cultivation to prevent the loss of moisture. This is truly important; but the conservation of moisture is but little more important than the free access of the air into the soil—not in volumes, but through the pores in the fine, firm, moist soil.

PLOWING.

Just a word on plowing. If you desire a good crop, and we have every reason to believe you do, then don't plow your fields dry or nearly dry, for you can not get a physical or mechanical condition of the seed- or root-bed that can possibly bring a good crop from a field plowed dry. The soil should be moist—not wet. Watch the furrow as it rolls over. If the particles readily separate all through, then

Chinaware Sets, 100 pieces	\$9
Clothes Wringers, new	\$1
Pieces Table Cutlery, good plate	\$2.50
Sure-Cutter Shears and Scissors, 2 pairs	50 cts
Wade & Butcher Razor Strap and Bone	\$1.00
\$1.00 box Medicated Toilet Soap	35 cts
Headquarter for Watches	18.00
Black Glass Buggy Paint, gallon	\$1.50
Gasoline Stoves, 2 burners	2.75
Poultry and Stock Foods, packet	15 cts
Cigars, per 100	\$1.50 to \$2.50
Washing Machines, none better	\$3.25
Send for Catalogue of many snap bargains.	
Agents wanted. New Process Mig. Co., Dept. 50, Lincoln, Kans.	

Fine Fruit Farm for Quick Sale

15½ acres, 2500 fruit trees, big crop promised, 20 acres alfalfa, timber, grove, five acre vineyard, adjoins town, two good houses, good new barn, 120 acres bottom, 40 acres grass, well and windmill, possession soon. Price \$7500. Will take one-third in stock, if priced right. Write for list.

Garrison & Studebaker
Minneapolis, Florence or Salina, Kansas

KILLED BY RATS

Thousands of LITTLE CHICKS

Why do you allow it? You can stop it if you use my method. Every poultry keeper should know it. Rat-proof walls, poison, etc., are unnecessary. Mail one dime for complete descriptive instructions.

J. A. Thompson, 633 Garfield, Topeka, Kan.

Jewell County |||| Morris & Woolsey
Randall, - - - Kansas

KILL the LICE

Why let lice eat up your poultry profits? Kill the lice with the

LIGHTNING

Lice Killing Machine

Guaranteed to do the work better, quicker, more easily and more thoroughly than any other method. Sold on a positive guarantee—your money back, if you are not perfectly satisfied.

Get one at once and double your egg profits.

Write today for free booklet.

Des Moines Incubator Co., Dept. 823

Des Moines, Iowa.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the KANSAS FARMER one year, both for only \$2.50. Address, THE KANSAS FARMER CO., Topeka, Kans.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; bromegrass; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance. Illustrated, 5x7 inches, 248 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA.

KANSAS

GIFFORD'S SHORTHORNS 22D ANNUAL SALE FROM ELMWOOD FARM

WILL BE HELD AT
Manhattan, Kans., on April 25, 1906, in the Sale Pavilion

20 extra good red Scotch-topped bulls from 12 to 20 months old, all in fine condition, sired by Red Gauntlet 3d 147509, a Crnickshank bull of exceptional quality. Twenty of the best young cows and heifers ever offered from the herd, all bred to Scotch bulls Senator Bruce 226244 and Cordelia's Knight 161501 (the best son of Red Knight). Cordelia's Knight will be included in the sale, is sound and all right, and a great breeder. This will be the place to get a choice bull or a few good cows to start with. Come to the sale and bring your friends. For a catalogue address

COL. GEO. P. BELLows,
COL. L. R. BRADY,
COL. JOHN BRENNAN, } Auctioneers.

F. M. GIFFORD,
WAKEFIELD, KANSAS.

you have the ideal condition. If too wet or too dry, it will not do this. Therefore, precede the plow by disking or harrowing, to keep the soil moist.

Plow about seven inches and follow as closely to the plow as possible with the sub-surface planter. At least, don't leave a field at noon without packing what was plowed before noon, and the same at night; and don't leave the field at night without harrowing all you have plowed during the day.

Not until the farmer realizes fully and clearly the vital importance of thorough fitting and really what thorough or proper fitting is, will he ever realize how much fertility he has in his soil or what an enormous crop his fertile soil can produce.—H. W. Campbell, in Nebraska Farmer.

At the end of Washington's administration there were sixteen States in the Union. There was also the "Northwest Territory," as it was called, not yet organized into States—the whole wide region between the Ohio and Mississippi rivers, from which slavery had been forever excluded by a law passed by Congress in 1787. The first census of the nation was taken in 1790; and the population was about four millions (3,929,214). The population March 1, 1906, according to the estimate of the Treasury Department, was 84,194,000.

Coffee was discovered in 1285 by a dervish named Hadji Omar, a native of the town of Mocha—hence the familiar name. Hadji Omar, lost in an Arabian desert, was dying of hunger, when he discovered some small, round berries. On trying to eat them he found, to his disgust, that they were extremely bitter. Then he tried roasting them, and finally steeped a few thus roasted in water. Naturally, this was coffee, and, though of the worst description, so agreeable did Hadji Omar find it that as soon as he could make his way back to his native town, he introduced this new drink to the wise men of the city. So well pleased were they with it that the dervish was made a saint.

Balboa crossed the Isthmus of Darien in 1513, and from the summit of the Andes beheld the wide expanse of the Pacific Ocean. Wading into its waters with his naked sword in one hand and the banner of Castile in the other, he solemnly declared that the ocean, and all the shores which it might touch, belonged to the crown of Spain forever.

Repeated experiment has proved that the practice of applying large quantities of manure to the acre on a limited space, making it necessary to leave much of the land unmanured, does not pay. Many farmers never apply less than twenty tons of stable manure to the acre, saying that they prefer to do well what they do and let the remainder of the land take its chances. Twenty tons of manure on one acre, plowed under for a spring crop, makes the soil richer for years—no doubt about that—but it will not improve the productive power of a farm nearly so much as the same amount of manure.

DO YOU WANT GOOD READING?



The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$3.00
The Cosmopolitan.....	1.00
Woman's Home Companion....	1.00
Kansas Farmer.....	1.00

Total \$6.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

KANSAS FARMER CO.,
TOPEKA, KANSAS.

used as a top dressing on three acres, provided clover is grown with this supply of plant-food. It is poor farming to keep up a few acres near the barn with the entire supply of stable fertilizer and let thin fields fail to make profitable crops. Manure crops are the chief dependence on a majority of farms and enough farm manure should be used to assist thin soils wherever found, so that all fields may increase their supply of vegetable matter and be permanently improved and then any additional supply can be safely used to enrich the poor field from which one wants a banner crop.—Epitomist.

The Use of Lemons.

A correspondent some time ago furnished the following recipe as a new cure for consumption: "Put a dozen whole lemons in cold water and boil until soft (not too soft), roll and squeeze until all the juice is extracted, sweeten the juice enough to be palatable, and drink. Use as many as a dozen a day. Should they cause pain or looseness of the bowels, lessen the quantity, and use five or six a day until better, then begin and use a dozen again. By the time you have used five or six dozen you will begin to gain strength and have an appetite. Of course, as you get better you need not use so many. Follow these directions, and we know you will never regret it if there is any help for you. Only keep it up faithfully. We know of two cases where both the patients were given up by the physicians, and were in the last stages of consumption, yet both were cured by using lemons according to directions we have stated. One lady in particular was bed-ridden, and very low, had tried everything that money could procure, but all in vain, when, to please a friend, she was persuaded to use them in February, and in April she weighed 140 pounds. She is a strong woman to-day, and likely to live as long as any of us. When people feel the need of an acid, if they would let vinegar alone, and use lemons or sour apples, they would feel just as well satisfied, and receive no injury." And a suggestion may not come amiss as to a good plan when lemons are cheap. A person should in those times purchase several dozen at once, and prepare them for use in the warm week days of spring and summer, when the acids of lemon and other ripe fruits are so grateful and useful. Press your hand on the lemon and roll it back and forth briskly on the table to make it squeeze more easily; then press the juice into a bowl or tumbler—never into tin; strain out all the seeds, as they give a bad taste. Remove all pulp from the peel and boil in water—a pint for a dozen pulps—to extract the acid. A few minutes' boiling is enough; then strain the water with the juice of the lemons; put a pound of white sugar to a pint of juice, boil ten minutes, bottle it, and your lemonade is ready. Another way to prepare lemonade is the annexed: Take the rind off four lemons, pared very thin, three-quarters of a pound of loaf sugar, pour on them one quart of boiling water. Take the juice of the lemons in another vessel, and pour on it one pint of boiling milk; let both remain until the next day. Then mix the whole together, adding half a pint of raisin wine; strain all through a jelly-bag until clear. The milk should be removed from the fire and used before the froth rises.—Health.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-conches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals a la carte. Ask for tickets via the Nickel Plate Road. Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

50 HEREFORDS 50

There will be about 50 CHOICE HEREFORD CATTLE SOLD AT PUBLIC AUCTION
AT SUPERIOR, NEB., ON APRIL 18, 1906

SALE BEGINS AT 1 O'CLOCK P. M.

This offering will consist of several cows sired by the great sire, Anxiety Monarch 63204, whose get has been very prominent at the leading shows of the West the last six years. Some of these cows will have calves at foot and breed again. Also blood of the great Ancient Britton and Vincent 2d 42942, both World's Fair winners in 1893. Some choice young bulls sired by Beau Donald 28th, the great sweepstakes winner and sire.

THE CATTLE WILL BE CONSIGNING BY THE WELL-KNOWN BREEDERS	
P. M. MORSE, Beaver City, Neb.	HATFIELD & SON, McCook, Neb.
W. R. WONDERLY, Inavale, Neb.	W. N. ROGERS, McCook, Neb.
R. N. LEWIS, Bladensburg, Neb.	BRITTAIN & SON, McCook, Neb.
and others	

Auctioneers:

T. C. CALLAHAN
and others...

For Catalogue address,

W. N. Rogers, Manager

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

The American Boy MAGAZINE

The Biggest, Brightest, Best
Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of The American Boy. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year)..... \$1.00
Kansas Farmer, 1 year..... 1.00

Total \$2.00
Both 1 year for..... \$1.50
Address,

KANSAS FARMER CO.,
Topeka, Kansas.

You Will Prosper

in the great, growing

Southwest

If you purchase a farm in the Southwest now, while the land is cheap, you will soon see grow up around you a community of prosperous, energetic men, who like yourself, have seen the possibilities of the Southwest, and have taken advantage of them. This very condition, which is rapidly forming all over the Southwest, is making the value of land increase rapidly, to the certain profit of those who own it.

There are more and better opportunities for making money—for home building, in the Southwest—along the line of the Missouri, Kansas & Texas Railway to-day, than anywhere else. You have only to get on the ground to prove this. If you are in any way interested in the Southwest, write to-day for a copy of my new paper "The Coming Country."

Go Southwest Now

Take advantage of the homeseekers' rates, April 17th and May 1st and 15th, and go and see the country for your self. On above dates most lines will sell both one-way and round trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

W. S. ST. GEORGE
General Passenger Agt., M. K. & T. Ry
580 Wm. Wright Building,
St. Louis, Mo.
Tickets on sale everywhere, via



"SOUTHWEST"

When writing our advertisers please mention this paper.

Are You Ready for Harvest?

There is a dignity about the International Harvester Company advertising we are running which is befitting the subject. "Mother Nature has done her part. The fields are ripe. Are you ready for the harvest?" That is the dignified way the great Harvester Company introduces to our readers its excellent machines, Champion, Deering, McCormick, Milwaukee, Osborne, and Plano, which aid in the harvesting of so large a part of the grain and hay raised in America.

Readiness for the harvest is all important. As the grain and grass are ripe, so are the machines ready and equal to the duty. Nobody questions the superiority of the International mowers and reapers. They have all been tried in the field, all of them for many years. They represent individually the best skill and material and adoption to duty that the country has produced. Many other machines have been invented, but most of them have disappeared. These have survived—a case of "the survival of the fittest." It remains for the farmer who has plowed and sown and raised his crop to provide himself from the machines at hand the particular ones which he needs to enable him to harvest his crop quickly and surely and economically.

No word of ours could add to the reputation of the International Harvester machines. No word is needed. It is enough to say that no mistake can possibly be made by purchasing any one of the six machines named. But the warning to get ready for the harvest is timely. International agencies are established at every considerable trading point to facilitate distribution and furnish supplies and repairs. These agencies have catalogues and descriptive matter on the long line of harvesting machines the company builds in addition to the mowers and binders. Farmers should call, procure the catalogues, make a study of them and determine in due time on the machines they will buy. Profitable farming demands improved machinery. Buy things that are standard and do it in time to have all things ready for the harvest.

There Is a Big Difference.

Laundry soap is intended for coarse work, such as washing clothes. Toilet soap is suited to taking the dirt from the skin. Shaving Soap is different—or ought to be. It should thoroughly moisten the hairs, hold them firmly against the razor, and then leave the skin smooth, cool, and velvety. Williams' Shaving Soap will do just this. The J. B. Williams Co., Gladstone, Conn., have made a specialty of shaving soap for nearly three-quarters of a century, and it is the "only soap fit for the face." In another column they offer to send a free trial sample on receipt of a 2-cent stamp. Be fair to your face and send for it.

Every household in Kansas should have Smith's 24th annual catalogue which is a veritable manual on the culture of small fruit-trees and shrubs. It will be sent free to any reader of the KANSAS FARMER by addressing a card to E. F. Smith, Lawrence, Kans., Drawer C.

The many years which the Reliable Incubator and Brooder Co. have been before the public have established their reputation for producing a most excellent line of poultry appliances. The machines they offer the present season are fully up to their previous standard of excellence, besides embodying further improvements. A complete description of their incubators and brooders will be found in their catalogue, which they will be pleased to mail free of cost to any one who will address The Reliable Incubator and Brooder Co., Quincy, Ill., requesting a copy of same. When writing, kindly mention this paper.

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 74 cars; Saturday's inspections were 32 cars. Offerings were liberal. Owing to stronger future markets, there was some improvement in the demand. Prices were unchanged. The sales were: No. 2 hard, 2 cars 81c, 2 cars 80c, 2 cars 77c, 2 cars 76½c, 10 cars 76c; No. 3 hard, 1 car 76c, 2 cars 74½c, 8 cars 74c, 10 cars 73½c, 7 cars 73c; No. 4 hard, 1 car 70c, 7 cars 69c, 1 car 68½c, 1 car 68c, 1 car 67c; rejected, 1 car 61c, 1 car 60c, 1 car choice 66½c; No. 2 mixed, 1 car 83c; No. 3 mixed, 1 car 78c, 1 car 70c; No. 4 mixed, 1 car 63c; No. 2 macaroni, 1 car 68c; No. 2 red, 1 car 94c, 2 cars to arrive 94c; No. 3 red, 1 car 91c; No. 2 white spring, 1 car 82c.

Receipts of corn were 69 cars; Saturday's inspections were 33 cars. The demand was good and prices were unchanged to ½c higher, as follows: No. 2 mixed, 4 cars 41c, 3 cars 40½c, 8 cars 40½c; No. 3 mixed, 1 car 41c, 10 cars 40½c, 13 cars 40½c; No. 4 mixed, 2 cars 39c; No. 2 yellow, 2 cars 41½c, 2 cars 41c; No. 3 yellow, 1 car 41c; No. 2 white, 1 car 42½c, 1 car 42½c; No. 3 white, nominally 42½c.

Receipts of oats were 26 cars; Saturday's inspections were 11 cars. Offerings were fairly large. The demand was good and prices averaged unchanged, as follows: No. 2 white, 1 car 31½c, 1 car 31½c, 4 cars 30½c, 5 cars 30½c; No. 2 mixed, nominally 30½c; No. 3 mixed, 2 cars 30c, nominally 29½c.

Barley was quoted 37@39c; rye, 56@58c; Kafir-corn, 68@70c per cwt.; bran, 88c per cwt.; shorts, 90@95c per cwt.; corn chop, 80@82c per cwt.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo., Monday, April 2, 1906.

The cattle run held up last week, 40,000 head coming in, about the same as the previous week, and 10,000 more than same week last year. Not quite as large a proportion were beef steers as the week before, but all through March the percentage of beef steers was larger than ever before for the same month, and probably larger than any month in the records of the yards. The very

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electrotype advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to
KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts-burn 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

HOLSTEIN—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Heather Eclipse 38761 in service. A. L. Wynkoop Bendena, Kans.

FOR RED Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D. 2, Tecumseh, Kans.

large number of cattle on feed in this territory, together with the ability of the packers to handle larger numbers here than ever before accounts for this. The market was strong last week, all killing cattle, except medium to common heifers and veal calves making a gain of 10@15c. Conditions in the country are still unfavorable to the purchase of stock cattle or feeding cattle, and this class declined 10@15c last week.

The cattle run is unexpectedly large to-day, 12,000 head here, but the supply last half of last week was small, and packers and outside buyers were ready to make liberal purchases this morning. Market on killing stuff is steady, stockers and feeders strong. Top last week on beef steers was \$5.85, top today \$5.90, highest for about six weeks, a good many cattle at \$5.50@5.80, and bulk of steers \$4.70@5.35, very few steers below \$4.50. Heifers and yearlings sell at \$4.25@5.25, fair to good cows \$3.75@4.50, bulls \$3@4.25, veals 50c lower than a week ago, at \$5@6.50, stockers and feeders \$3@4.80, most sales in this class \$3.50@4.50. Total cattle receipts for March increased 20 per cent over March a year ago, and 12 per cent over March two years ago, which was the largest previous March in cattle receipts at this market.

Hogs sold higher all last week till Friday, but closed the week 5c lower than high time. A feature was the increasing value placed on light weights, hogs below 200 pounds selling only 5c below the top now. Market opened strong to-day, but broke 5c before the close, top \$6.40, bulk of sales \$6.25@6.27½. Run to-day 9,000 head. Dealers expect liberal supplies and lower prices this week.

The mutton market improved steadily after Monday last week, closing 5@15c above close of previous week. Run is liberal to-day, at 11,000 head, market strong, lambs selling at \$6@6.50, clipped lambs late last week at \$5.40, and spring lambs Friday at \$9. Wethers and yearlings have been scarce, but are quotable at \$5.50@6, ewes bring \$4.75@5.40, feeding lambs last week at \$5.25@6. J. A. RICKART.

South St. Joseph Live Stock Market. South St. Joseph, Mo., April 2, 1906.

The opening of the trade at this point and at all central points as well, indicates some improvement in conditions of country roads, and a consequent enlargement in the movement of live stock. Receipts of cattle to-day at this point were about 2,000, and did not show so much increase over last Monday, but at five leading points there was

CATTLE.

FOR SALE—One roan and two red yearling registered Shorthorn Bates bulls. Splendid individuals. C. G. Cochran & Sons, Plainville, Kansas.

RED POLLED BULLS—Five bulls 9 to 12 months old, for sale cheap. Nice ones, registered. H. L. Pelett, Eudora, Kansas.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale, Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGRIED SHORTHORN BULL 3 years old, for sale cheap. Mrs. Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans., 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 28-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

HORSES AND MULES.

FOR SALE OR TRADE—For other stock, 2 well-bred jacks, all ready for service. We have too many and must sell them. Hughes & Carey, Route 3, Hartford, Kans.

FOR SALE CHEAP—Fine young trotting-bred stallions, by Flood Wilkes. J. E. Breckbill, Detroit, Kansas,

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,300 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE—at reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howald, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,000 pounds, white spot in forehead, barn wire cut on side, somewhat swayed back. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

F FARMS AND RANCHES.

320 ACRES, 6 miles from Emporia; 6 room house, barn 30 by 36, cattle-shed 20 by 40; good orchard and other fruit, 70 acres cultivated; 300 acres can be plowed or mowed; watered by wells and creeks; one mile to school. Price \$28 per acre. Can give immediate possession. Hurley & Jennings, Emporia, Kans.

800 ACRES FENCED—Half wheat land, house, barn, well, windmill, orchard, 250 acres wheat and barley, 5 miles to railroad. Terms. E. H. Boyer, Meade, Kans.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35c; 1,000, \$2.25. Raspberry, 100, 70c; 1,000, \$6. Blackberries, 100, 70c; 1,000, \$5. Grape, 2 year, 5c. Currents and gooseberries, per 10, 50c. Asparagus, 100, 40c; 1,000, \$2.25. Rhubarb, 10, 30c; 100, \$2.25. Gladiolus bulbs per 10, 10c; 100, 75c. Dahlias, per dozen 75c. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Spriggin Nurseries, Bonner Springs, Kans.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes six kinds. Price on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

FOR ONE DOLLAR I will send you 300 strawberry plants, 5 kinds, or 100 raspberry, 3 kinds, or 100 blackberry, or 25 grapes, 3 kinds, or 25 currants or 25 gooseberries or 20 asparagus: none better at any price. A. J. Nicholson, Manhattan, Kans.

an apparent increase of 11,000. Light steers on the local market sold about steady, the stocker and feeder demand helping this end of the trade, but for fat steers of all weights, trade had a slow, unsatisfactory pulse with prices ruling weak to a dime lower. The stock of all kinds was in very light supply, and held fully steady. The calf market broke about 25c with choice veals going at \$6.25. The stocker and feeder demand was fairly good, and local dealers picked up everything offered at steady prices. The coal strike is now a factor that will be watched very closely by packing interests, and a shut-down at the mines would be very apt to affect the live stock markets adversely. For this reason it would be just as well for owners to be a little conservative for a few days, although the situation to-day is not considered serious.

Local receipts of hogs were almost double the number arriving a week ago and all other points showed quite an enlargement. The demand was pretty fair but packers' movements clearly showed that they are watching for increased receipts with coming improvement of the roads and will make a strong fight to prevent prices from going any higher. The market opened strong to 5c higher but settled back to about steady. The quality of hogs was exceptionally good and for this reason the prices on paper looked a little higher than at the close last week. Tops to-day sold at \$6.42½, with the bulk at \$6.32½@6.40.

Receipts of sheep at this point were quite liberal, made up largely of Colorado lambs. The demand was quite good and prices were held fully steady for lambs and steady to strong for sheep. Top lambs sold at \$6.45 with bulk at \$6.30@6.40 and best ewes at \$5.40. J. A. RICKART.

WARRICK.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kansas.

POULTRY.

WHITE PLYMOUTH ROCKS exclusively. Eggs \$2 per 15; \$3 per 30. All orders given prompt attention. S. C. B. Capson, Route 7, Winfield, Kans.

R. C. B. LEGHORN EGGS FOR SALE. Stock from best laying strains \$1 for 15; \$5 for 100, best selected and fresh eggs. Mrs. Bertha Evans, Route 4, Box 32, Lyons, Kans.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs 5 cents each, \$4 per 100. J. L. Moore, Eureka, Kans.

Buff Leghorns

S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Ks.

HIGH CLASS POULTRY

Silver Wyandotte, White Wyandotte, and White Plymouth Rock. Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

BUFF ROCK EGGS

Here they are. Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

HELP WANTED.

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 ranch, Bliss, O. T.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

MISCELLANEOUS.

DISCOURSE YOUR WANTS—We submit them to our customers free. Mutual Benefit, Omega, Oklahoma.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; 8c 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

FOR SALE OR TRADE—The best livery stable in Topeka, from 21 to 27 boarders, will livery over \$2,000. \$1,800 cash takes it or will trade for country store. Ill health reason for selling. Address W. R. Falkiner & Co., 109 West 7th St., Topeka, Kans.

THE MAGIC "ONDER"—A Fortune Ring, just out. Send 5 cents for sample. Agents wanted. Original Novelty Co., 714-167 Dearborn St., Chicago, Ill.

EXTRA MONEY TO SPEND—Every woman, boy and girl on the farm wants some way to earn money, so they can buy the extra things they want. This can be done by a little business of your own. Send \$1 to M. M. Newby, Yukon, O. T., and learn how one boy made \$300 and never missed a day's work.

REAL ESTATE.

FOR SALE—Cont land, farms, and timber. The place for a poor man to get a home. Campbell, box 1453, Fort Smith, Ark. Real estate man need not apply.

FOR SALE—A good wheat farm of 320 acres; 120 acres in wheat. Good improvements. Twenty dollars per acre; \$25 cash, the rest in yearly payments. Two miles north of Ells. Address Jno. Yobsh, Ells, Kansas.

FOR SALE—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

40-ACRE FARM—Close to good town, very good buildings, with growing crops, \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bainum, Arlington, Kans.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Hustedt Realty Co., City Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bainum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—80 acres Arkansas second bottom, 4 miles east of Great Bend. All in cultivation. Fine alfalfa land. Address R., care Kansas Farmer, Topeka, Kans.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses, and other outbuildings, feed yards, corrals, stock sheds. One tenant house; convenient to church and school on Kanza route, 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

2160 ACRES—ALL BROKEN—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—ALL FENCED—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Plainville, Kansas.

FOR SALE

2,160 acres, 570 acres in wheat. 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

A CORN AND ALFALFA FARM.

FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address

M. E. Beall, Woodruff, Kans.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice, Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY, 819 Wainwright, St. Louis.

H. C. BOWMAN,

SHAWNEE COUNTY FARMS.
TOPEKA RESIDENCE AND MERCANTILE PROPERTY.

VACANT LOTS.
TEXAS RANCH LANDS,
42 Columbian Bldg., Topeka, Kans.

MCKENZIE LAND AND IMMIGRATION AGENCY

Wants an agent to represent them in every county in Eastern Kansas and Eastern Nebraska to solicit buyers for Thomas and Bowlin County Lands. We own and control large tracts of the choicest land and prefer to deal through agents. It is not necessary for a man to be engaged in Real Estate Business to act as an agent. A successful farmer makes the best agent. Write us for full particulars and advertising matter. **McKinzie Land and Immigration Agency, City Kans.**

REAL ESTATE.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 166 Wabash Avenue, Chicago.

FOR SALE Farms—Bargains; 500 farms, stock ranches, Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Ks.

FOR SALE 640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write

STEVENS & RUBY, STOCKTON, KANS.
Mentor Kansas Farmer.

NORTON COUNTY LAND

We handle Norton County Lands, where alfalfa, corn and wheat is raised successfully. Norton County lies in the middle west, where we do not have drouths or hot winds. Write me for full particulars.

J. W. Bressler, Clayton, Kansas

640 acres, half in cultivation, 150 acres in wheat, half to buyer, 150 acre spring crop, one-fourth to buyer, well, mill-tank, grove; \$11 per acre; best soil, 5 miles to market.

Oakley Land and Investment Co.,
Oakley, Kansas

KANSAS LAND FOR SALE.

640 acres of fine wheat land, price \$10 per acre, \$1,800 cash, balance in small yearly payments, 6 per cent interest. **Niquette Bros., Salina, Kansas.**

IF YOU WANT A HOME

Write HAYES, "The Land Man,"
Drawer K, - - Almena, Kans.

HOBBS & DETWILER
Real Estate Dealer Smith Center, Kans.

We handle Smith County Lands, located in the best corn county in Kansas. Write us for full particulars and complete land list.

KNIGHT & SPICKELMIER, Centralia, Kan.

Phillips County and Western Kansas

280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; my price \$25. 180 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 acre. W. B. Gaumer Realty Co., Phillipsburg, Kans.

Why Do So Many Men Toil For Others.....

Helping enlarge their bank accounts, when each and every man, can become a land owner by corresponding with H. P. Fitzgerald, who will sell you land for \$5 an acre, which will produce 30 bushels of wheat and 40 bushels of corn per acre. One crop pays for the land. Don't wait. Write today to H. P. Fitzgerald, Jamestown, Kans.

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, - - Kansas

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.)

Mentor Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. **THE DOWNS REALTY CO.,** Downs, Kansas.

Hurley & Jennings' Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

Holton Real Estate and Loan Co.

Holton, Kansas.
Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

Sheridan County Land

A choice section six miles from Hoxie, \$12.50 per acre, 320 acres, \$2,500. A well improved 300 acre tract, three miles from town, perfect land, \$15 per acre. Thousands of acres of northwestern Kansas land for sale at \$8 to \$15 per acre. Write for statistics showing the products of the County in the past year and our price list.

Sheridan County Land Co.
Hoxie, Kansas

REAL ESTATE.

REAL ESTATE.

WHEAT FARMS ON EASY TERMS**IN Sherman County, Kansas**

At from \$5 to \$15 per acre. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King, McPherson, Kansas

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),
Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.

Mention Kansas Farmer when you write.

WE GIVE YOU TEN YEARS TIME

in which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make

you and your family independent for life. Low Prices.

Write for full information. **FREE.**

THE UNION PACIFIC LAND CO., Omaha, Nebraska.

Department F.

**Getting What You Want**

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and rich sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do.

Send for our booklet. Write for particulars. It will pay you. Address

LOS MOLINOS LAND CO., LOS MOLINOS, TEHAMA CO., CALIFORNIA.

100,000 ACRES OF IRRIGATED LAND**in Sunny Southern Alberta, Canada****THE LAND OF WINTER WHEAT, ALFALFA AND SUGAR BEETS**

These lands are part of the great irrigation project constructed by the Canadian Pacific Ry. in the CALGARY DISTRICT OF SOUTHERN ALBERTA. We now have ready for the farmer one hundred thousand acres of those lands, lying on the northern side of the main line of the CANADIAN PACIFIC RAILWAY at Gleichen, extending back ten miles in a solid block,

at from \$18.00 to \$25.00 an Acre

The canals and laterals are to be maintained forever by the Canadian Pacific Ry. at a nominal cost of 50 cents per acre per annum.

NO FLOODS, NO DROUGHTS, EVERY YEAR A HARVEST YEAR

this too on land that will produce 30 to 60 bushels of hard winter wheat, 80 to 100 bushels of oats to the acre, with enormous yields of alfalfa, sugar beets and all small grains. Remember, the lands are all adjacent to the main line of the Canadian Pacific Ry., giving easy access to the world's best markets. For further particulars and certificate for low railroad rates, write

Canadian Pacific Irrigation Col'n Co. Ltd.

CALGARY, ALBERTA, CANADA.

Watch Tacoma Grow!

Population, 1900, 37,711

Population, 1906, 85,000

Landing industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

CASH

FOR YOUR FARM, HOME, BUSINESS OR OTHER PROPERTY. We can sell it for you, no matter where it is or what it is worth. If you desire a quick sale send us description and price. If you want to

buy any kind of property anywhere send for our monthly. It is free and contains a large list of desirable properties in all parts of the country. CHARLES A. WILSON, REAL ESTATE DEALER, 615 Kansas Avenue, Topeka, Kans.

Merchandise Broker

Stocks of merchandise of all kinds bought and sold. Can handle your business anywhere in Kansas.

J. J. CARTER,
Room 3, Central National Bank Bldg.,
Topeka, Kans.

Sheridan County Land

ARE YOU LOOKING FOR LAND? DO YOU WANT A HOME?

In the great wheat and corn belt of Kansas, where land sells from \$10.00 to \$25.00 per acre. If so, write us your wants.

All communications promptly answered.

Write us.

TRIMBLE & TRIMBLE, Selden, Kans.

When writing advertisers, please mention this paper.

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Crimson Wonder 38755 Herd

Will have something fine to offer. Can furnish trios not akin sired by Crimson Wonder 38755 and Kerr's Champion 28355.
Mr. & Mrs. Henry Shrader, Wameca, Kans.

Orchard Hill Herd of Duroc-Jerseys.

Some fine summer and fall males for sale.
Summer gilts are being bred.
R. F. NORTON & SON, Clay Center, Kans.

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

HIGHLAND HERD OF Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

Egypt Valley Duros
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kans.

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description.

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30378s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27966, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

E. E. Axline's Public Sale of Poland-Chinas

AT
Independence, Mo., April 5, 1906

THIRTY HEAD—10 bred gilts, 10 open gilts, 10 choke young boars. Send for catalogue.

E. E. AXLINE, Oak Grove, Missouri

Maple Valley Stock Farm
The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented.

H. N. HOLDEMAN, R. R. No. Girard, Kans.

Decatur County Herd of POLAND-CHINA SWINE

12 fall boars for sale out of Chief Tecumseh 2d and Corrector sows, and sired by King Perfection by Royal Perfection. I will sell them right.

R. H. WEIR, Route 3, Oberlin, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans.

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard, Route 2, Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Stich Perfection 32804, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kans.

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kans.

Chester-Whites

O. I. C. SWINE

Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair

CHESTER-WHITE HOGS
Shorthorn cattle, Oxford sheep and Peafowls. I won 18 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs
Scotch Collie Dogs

B. P. Rocks
One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulna, Silver Mina and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

Tamworths

Lincoln Park Herd
of pure-bred Tamworth Hogs

Stock for sale. Write to Mrs. E. L. Lindner, Clay Center, Kans.

Berkshires

EAST RENO BERKSHIRES.

FOR SALE—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Wiltem, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jonrist topper 76277.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72668. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS., Route 1, Lawrence, Kans.

SUTTON'S BERKSHIRES Imported Blood

30 extra choice boars, 100 to 150 pounds. 40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kans.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 3346, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion show and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902, Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 63035, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods," Sows

3 to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus

Aberdeen-Angus Cattle

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kans.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale.

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kans.

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, POMONA, KANSAS

ROUTE 1,

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

Young Stock for sale.

WILKIE BLAIR, Girard, Kansas

Headquarters for Boars and Gilts. Write me.

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale.

Also breeders of Percheron Horses, and Plymouth Rock Chickens

Address, S. C. BARTLETT, Wellington, Kansas.

ROUTE 5,

HALCYON HOME STOCK FARM

Young stock for sale.

Polled Durhams

Offer some fine blooky bulls about one year old.

C. J. WOODS, Chiles, Miami County, Kansas

When writing advertisers please mention this paper.

Herefords

Registered Herefords

Individual merit and choicest breeding. Dale Duplication 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

Vermilion Hereford Co., VERMILION,

Boatman 56011 and Lord Albert 131557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 66634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

Shorthorns

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by

L. A. MEAD, Kingdown, Ford County, Kansas

For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM JOHN REGIER, Prop., Whitewater, Kans.

Breeder of thick-fleshed, early-maturing Shorthorn cattle.

NONPAREIL STAR 188488 at head of herd.

PLAINVILLE Shorthorn Herd

Headed by Prince Lucifer 188685

A pure Scotch bull. Stock for sale at all times.

N. F. SHAW,

Shorthorns

Registered Shorthorn Cattle
Duroc-Jersey Swine
 Also choice B. P. Hocks. All Stock fashionable bred, and choice individuals. For Sale—One July 27, '05 built; price, \$100. Eggs, Bradley mating, \$2 per 15; range eggs, \$1.50 per 15; \$5 per 100.
 G. E. Newton, Whiting, Kansas
 (Successor to Newton Bros.).

Pearl Shorthorn Herd

Forty Young Bulls For Sale—Ranging from 6 to 24 months old and sired by the noted Scotch bulls, Barou Ury 2d, 124970, Sunflower's Boy 127337, and Bold Knight 179054. Address

C. W. Taylor

(Wire or Phone), Pearl, Dickinson Co. Kans. (Mall Route No. 2), Enterprise, Kansas.

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
 Route 8. Topeka, Kansas.

New York Valley Herds

of Shorthorns and Berkshires
 Baron Rupert 243237 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall boars and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
 Route 1, - - - Yates Center, Kans.

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldfinch, full sister to the champion Lavender Viscount in service. Cruckshank and Cruckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
 Topeka, - - - Kansas

Holsteins

C. F. STONE, Peabody, Kansas,
 Breeder of
PRIZE-WINNING HOLSTEINS.
 Young bulls and a few young cows and
 heifers for sale.

Barn Plans and Outbuildings

New, revised and greatly enlarged edition,
 Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARNs
 CATTLE BARNs AND STABLES
 DAIRY BARNs
 CATTLE SHEDS
 SHEEP BARNs AND SHEDS
 PIGEONERS
 POULTRY HOUSES
 CARRIAGE HOUSES AND HORSE BARNs
 CORN HOUSES AND CRIBS
 ICE HOUSES

ICE HOUSES AND COOL CHAMBERS
 DAIRY HOUSES
 CHEESERIES AND CHEESE FACTORIES
 SPINNING HOUSES
 GRANARIES
 STOKE HOUSES
 DOG KENNELS
 MILKS
 ROOT CELLARS AND ROOT HOUSES
 BUILDINGS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5 x 7 inches, 404 pages.

Cloth, price, postpaid, \$1.00

THE KANSAS FARMER CO.
 TOPEKA, KANSAS

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
 Breeder of Galloway Cattle

Horses and Mules

W. A. Fleischer, Hoyt, Kansas
 Breeder of
Mammoth and Spanish Jacks
 also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
 Windsor, Missouri

REGISTERED BLACK MAMMOTH
 and CATALAN JACKS, SADDLE and TROTTING HORSES

The best in the state and at a low price. Come, or write for prices on what you want.
 G. A. FEWEL
 LEETON, JOHNSON CO., MO

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sex. Also Shorthorn cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. Thisler, Chapman, Kas.

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 16 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. Cook & Co.
 Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to registry, weight about 1,700 pounds
 4 and 10 years of age.

One Black Percheron Stallion
 Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or Jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

Collections made in all parts of the United States
 No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

TOPEKA. KANSAS
 Special attention given to stock-breeders accounts.
 Reference furnished on application.

When writing advertisers please
 mention this paper.

Live-Stock Auctioneers**JOHN D. SNYDER,**

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN

AUCTIONEER

Bunceton, Mo.



First
 Class
 Service.
 Best
 Results.
 Terms]
 Low.

JAS. W. SPARKS

Live Stock Auctioneer
 MARSHALL, MISSOURI

Fifteen
 years
 selling
 for
 America's
 best
 breeders.
 Moderate
 terms
 for
 best
 service.



BERT FISHER
 Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
 Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
 Auctioneer
 Manhattan, Kansas

Fine stock sales a specialty
 All Herd Books. Catalogues compiled. Sale
 tent free.

Z. S. BRANSON**Live Stock Auctioneer**

Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values
 Terms reasonable. Inquiries cheerfully answered.

John Daum Nortonville, Kansas**Live Stock Auctioneer**

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

Booklet on**The Southwest Limited**

Before planning your next trip East it would be worth your while to look through the booklet describing The Southwest Limited, the Train of Trains from Kansas City to Chicago, via the

Chicago, Milwaukee & St. Paul Railway

It will be sent free to those interested. A postal to the undersigned will bring it by return mail.

The Southwest Limited leaves Union Station, Kansas City, 5.55 p.m.; Grand Ave., 6.07 p.m. Arrives Union Station, Chicago, 8.20 a. m.

The Southwest Limited took first place in its first year—and holds it.

G. L. COBB

Southwestern Passenger Agent

Tickets, 907 Main Street
 KANSAS CITY

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humbugged" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "selling clothes" on, no man with cash or bankable note gets away from Iams. Iams' daily "Horse show" and his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

80—STALLIONS—80

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent tan stallions." All registered, approved and stamped by European Government Dad. It's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a clinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'mas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$1200 stallions are much better than our neighbors paid those Ohio men \$4000 for. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM

A choice lot of Imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS.

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yalti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

H. E. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA UNIVERSITY.

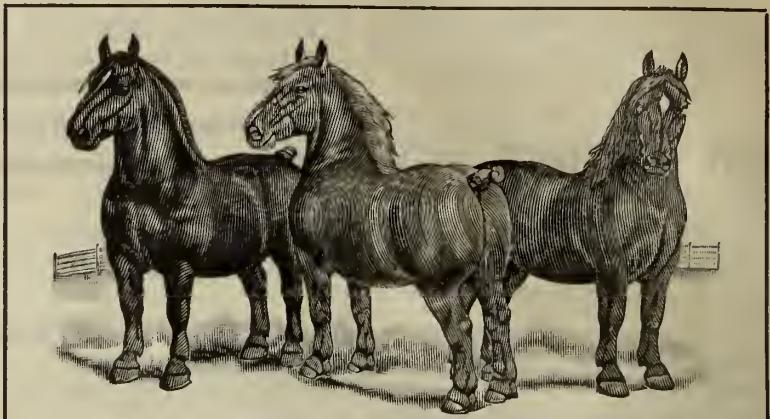
How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager,

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....
PEARSON'S MAGAZINE

NATIONAL MAGAZINE

AMERICAN BOY OR.....

PHYSICAL CULTURE MAGAZINE.....

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

SHORTHORN EVENT EXTRAORDINARY

At Fredonia, Kansas, April 13, 1906

...ALL GOOD ONES!!!

The Southeastern Kansas Improved Stock Breeders' Association have decided to make their annual Spring sale at Fredonia, Kansas, the most important event not only of their circuit but of Kansas for this year. We know that we **must** offer **good** cattle to have a **good** sale, and we are offering our best cattle—all good ones.

We know it will not do to try to make a few good ones sell a lot of culs, so we are offering absolutely all good ones. Tabulated pedigrees will show animals by the following great Scotch and Cruickshank bulls: Imported Collynie, imported Mariner, imported Choice Goods, imported Lord Cowslip, imported Tillycairn, Battle Axe, and Golden Victor, Jr., of Harris breeding; Scottish Emperor, of Bellows breeding; Kinellar, Captain Archer, and Aberdeen, of Hanna breeding. :: :: ::

...ABSOLUTELY NO CULLS!!!

S. C. HANNA

Howard, Kans.

H. M. HILL

Lafontaine, Kans.

E. S. MEYERS

Chanute, Kans.

O. E. MORSE & SON and others

Mound City, Kans.

Apply for Catalogues to **H. E. BACHELDER**, Secretary, Fredonia, Kansas.

Auctioneers. COLS: BELLOWS, HARRIMAN and SHEETS.

Shorthorn Dispersion Sale Hope, Kansas, April 26, 1906

50 Head including the great herd bull, The Rustler 186800, sired by the Lad For Me 146618 and out of the dam of the champion Ruberta. The 14 of his get, 9 heifers, 5 bulls, calves and short yearlings, that are in the sale, prove him one of the greatest sires in the West. The balance of the offering are cows and heifers bred to this great bull; a few of them have calves at side.

Send for Catalogue

Cols. Sparks and Brady, Auctioneers

H. R. Little, Hope, Kansas

A. M. ASHCRAFT'S Public Sale of Shorthorns AT ATCHISON, KANSAS, APRIL 10, 1906

42 HEAD

27 choice cows and heifers, 15 bulls, short yearlings and 2-year-olds—nearly all by the short-legged Scotch bull Harmony's Knight 28509, and are of the same type as their sire. The cows and heifers are all dark red, very uniform; all have been reared on the farm and are all in calf to the good Scotch bull Scottish Minstrel 234970 by Imp. Scotch Mist.

Free conveyance from Carter's Livery Barn to farm

where sale will be held

Auctioneers: COLS. GEO. P. BELLOWS, HARRY GRAHAM, JOHN DAUM

Send at once
for Catalogue

A. M. Ashcraft, Atchison, Kan.

PUBLIC SALE OF

Shorthorn Cattle...

THURSDAY, APRIL 19, 1906**Hiawatha, Kansas****32 COWS AND HEIFERS****22 BULLS**

Held under the auspices of the Brown County Improved Stock Breeders' Association. This offering consists of choicely selected animals that are considered worthy specimens of the breeding establishments represented. All females of breeding age will be bred to Scotch and Scotch-topped bulls. Some will have calves at foot. Bulls guaranteed breeders with proper care. The breeding establishments represented by this offering are as follows:

G. Y. Johnson, W.H.B., Kans.
T. J. Sands, Robinson, Kans.
Everett Hayes, Hiawatha, Kans.
John McCoy, Sublette, Kans.
James P. Lehr, Sublette, Kans.

Geo. Manville, Pancette, Mo.
W. W. Brown, Weston, Mo.
Ed. Schuler, Falls City, Neb.
A. F. Robinson, Morrill, Kans.
Bert G. Wise, Reserve, Kans.

For further information and catalogue address

**EVERETT HAYES, SECRETARY and
MANAGER, :: :: HIAWATHA, KANS.**

Mail bids may be sent to COL. GEO. P. BELLOWS, Auctioneer.

The Kansas Farmer...

The Greatest and Best Advertising Medium for
Reaching the Farmers of the Middle West, of
TOPEKA,

KANSAS



CALIFORNIA

Suburban Villa Farm, Residence Lot or Round Trip Railroad Ticket

So Easy!!

To be earned by the Intelligent Man or Woman, over 18 years of age, complying with the following conditions. READ THEM.

EXPLANATORY INTRODUCTION.—To enable the Fresno Irrigated Farms Co. to determine if the advertising now running in Eastern farm papers is being intelligently understood, we will award property valued at \$1325 as compensation to the readers of this paper for articles written for our use. Articles must only be furnished by those residing in Kansas, Illinois, Indiana, Iowa, Missouri, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin, for the best written article in not less than 800 words or more than 1,000 words. The article must be written on only one side of the sheet of paper, either in your own handwriting or on a typewriter.

CONDITIONS.—Write your article on the following subjects.

No. 1, General subject will be Fresno Irrigated Farms. Our choice farm lands are only \$35 to \$75 per acre sold upon liberal terms.

No. 2, Climate.—Give reasons why you would prefer to live where snow is unknown.

No. 3, Soil.—Explain the nature of the soil and its adaptability.

No. 4, Irrigation.—State why under farming dependent upon rainfall the best lands of Illinois or Iowa have increased in value at the rate of only \$2 per acre per year since their first settlement, whereas Fresno Irrigated lands advance in value at the rate of \$20 to \$25 per acre per year. Give the advantages of Irrigation over dependency upon rainfall.

No. 5, Town of Kerman.—Situation, on what railroad, in what county, and about how many miles from your home to Kerman. Estimate the probable population of Kerman three years from now.

No. 6.—State why you would like to live on a Fresno Irrigated Farm and what advantage the new town of Kerman offers over your present home.

No. 7, Productions.—Under this heading you can select as many of the products mentioned below as you are most familiar with. You do not have to write upon all of them. We are simply offering you these particular products as suggestions to aid you in getting your article up right. It would be well in this section to estimate what your understanding is of the productiveness of the soil per acre when devoted to these products. SUGGESTIONS: A raisin vineyard, a peach orchard, a fig orchard, a table grape vineyard, a wine grape vineyard, a chicken farm, a dairy farm, cattle and live stock ranch, an alfalfa farm; estimate the number of crops of hay cut per year and about how many dollars per acre per year it will produce.

Permissible Source of Information.—You may ask for the 64 page Illustrated Book published by the Fresno Irrigated Farms Co. of Fresno, California. You may obtain pamphlets issued by the Fresno Chamber of Commerce

or the following newspapers: The Kerman News of Kerman, the Fresno Democrat or the Fresno Republican of Fresno, or the Southern Pacific Company's Booklets on the San Joaquin Valley. All these will be mailed you free when you write for them. Any or all of these can be used by you in writing your article as sources of information, but they are not to be copied. You must use your own language. You can apply to any other source of information that you know of for facts but remember your article must be original, and not copied from any book or pamphlet.

Those Barred from Competition.—Any one that has been in Fresno County, California, is barred from this competition for the reason that we intend every reader of this paper to have exactly the same chance, especially those that have not been to California. You must not write to us for further information about this competition other than that which we print. Every one is entitled to our printed booklets and circulars.

The Article.—Your opportunity is just as good to earn these valuable pieces of land as any one else, plain words and common sense is all that you need use. A fine literary style is not at all necessary. All articles must be received on or before June first, 1906.

Awards.—Awards will be made July 1st, 1906, land will be deeded in payment for articles July 10th, 1906, and ticket will be forwarded any time wanted within three months after July 10th, 1906.

Committee on Awards.—Senator Drew of Fresno, State of California, and Trustee of the University of California, Chairman A. L. Hopps, President of the Fresno County Chamber of Commerce, O. J. Woodward, President of the First National Bank of Fresno. Awards will be made absolutely on the merit of the article and for no other reason.

Awards.—First, For best article, a five acre villa farm adjoining the town of Kerman already plowed, plotted and seeded in alfalfa, and already under irrigation, valued at \$1000. Second, For next best article, a residence lot in the town of Kerman, size 50x140, streets already graded, town containing new \$10,000 Hotel within easy distance of the railroad station or the park. All modern conveniences, such as telephone, telegraph, express, water works, value \$250. Third, For third best article, a roundtrip railroad ticket from Chicago or any point west of Chicago to Kerman, California, and return to starting point, value \$75.

A Hint.—Read our ads in back numbers of this paper. They will give you still more information. The advertisement of this offer will not appear again, SO ACT NOW.

WRITE AND
ASK FOR OUR
64-PAGE
BOOKLET.
WE WILL
MAIL IT
FREE.



THIS SHOWS
THE STYLE OF
IMPROVEMENTS
WE ARE
PUTTING UP
AT KERMAN,
CALIFORNIA.
BUILDING NOW
BEING ERECTED.

The Kerman Inn—New, Modern and Up-to-Date.

Fresno Irrigated Farms Co.,

Main Office—511 Kohl Bldg., San Francisco, California
230 Pacific Electric Bldg., Los Angeles, California
Sales Office—1161 I Street, Fresno, California

KAF



Volume XLIV. Number 15

TOPEKA, KANSAS, APRIL 12, 1906

Established 1863. \$1 a Year

Santa Fe Good Roads Special

Realizing the difficulties that confront the farmer when he attempts to move his tremendous crops from the fertile fields of Kansas to the railroads for shipment to the markets and the consequent difficulty the railroads have in meeting his demands, the Santa Fe Railroad System inaugurated a good-roads train which held its first meeting and demonstration at Olathe, Kansas, on March 26. Under present conditions, when bad weather comes, it is impossible for farmers to move their crops to market and the railroads have cars lying idle that they would gladly have in use. The price of farm products increases and the farmer is compelled to sit idly by with a large yield of valuable products in his bins and feed-lots and feel his inability to realize on them. On the other hand, when the roads become good the farmers all load up their wagons and go to the shipping point at once. The market is glutted, prices go down, and the railroad is unable to furnish a sufficient number of cars. Chief among the things which will bring about a change in these conditions is the making of good country roads. With good roads the farmer can reach his market at any season of the year and realize on his crops when the prices are at their best. The railroads can furnish cars at all times and avoid that congestion of traffic which causes such great inconvenience and loss at certain seasons. For these reasons and others, the Santa Fe railroad officials have adopted the broad, progressive policy of assisting their patrons in every way possible because their interests are mutual. The prosperity of the patron means the prosperity of the railroad. Kansas has the distinction of having had railroads before it had either freight or passengers. The Santa Fe railroad was the pioneer of the West. It was conceived in Kansas brains and its first rails were laid by Kansas money. No influence has been so great in the development of the South and West as has the Santa Fe railroad. It is a Kansas institution although it reaches far beyond Kansas State lines. It has more miles of road in Kansas than in all the twelve other States and Territories through which it passes. The keen, far-sighted business men at the head of the Santa Fe System realize that conditions in Kansas are widely different now from what they were when their rails were first laid; when there were no fences and the country road might be miles wide if desired. They realize that it is impracticable and undesirable to tax the farmers to build macadam roads, and they further realize that a real solution of the good-roads question has been found in the use of the split-log drag so strongly championed by Mr. D. Ward King, of Maitland, Mo.

In order that farmers may get their information at first hand, a special car was equipped with a simple split-log drag, made at small cost and in a short time, as its only illustrative apparatus. There was no other machinery and there was nothing to sell. It was a free gift to the people of Kansas.

THE MEETINGS.
The man who made the split-log drag famous.

partment of the Kansas State University, and Thos. H. MacDonald, Ames, Ia., engineer of the Iowa Highway Commission. Other members of the party were W. T. Treleaven, Chanute, Division Freight Agent, Santa Fe railroad; R. E. Wilson, Chicago, Traveling Industrial Agent, Santa Fe Railway; H. E. Hurshey, Galveston, Tex.; Traveling Freight Agent, Gulf, Colorado & Santa Fe Railway; L. M. Nellis, Topeka, of THE KANSAS FARMER; J. C. Burnett, Topeka, Division Freight Agent, Santa Fe Railway, and W. H. Robbins, Minneapolis, St. Paul, and Sault Ste Marie Railroad.

THE MEETINGS.

This party was met by a large and enthusiastic crowd at every stop on the route with the exception of one place where bad weather interfered. The meeting at Olathe was characterized by the large attendance of county and road officials some of whom drove twelve miles over almost impassable mud roads in order to be present.

At Wellsville, seventy-five men signified their intention of building and using split-log drags, and since the meeting was held there on March 27, the rural route carriers report that more than forty miles of road on their routes have been dragged and greatly improved.

At Ottawa, the business men of the city held a meeting in the First National Bank before the good-roads meeting was called to order and raised \$500 to be distributed in prizes among the farmers who would maintain the best roads by use of the split-log drag. These prizes will be announced in the premium list of the Franklin County Fair Association and the prizes will be awarded during the fair as one of its features. Other stops were made at Iola, Chanute, Erie, Coffeyville, Inde-

pence, Lawrence, Emporia, and Topeka.

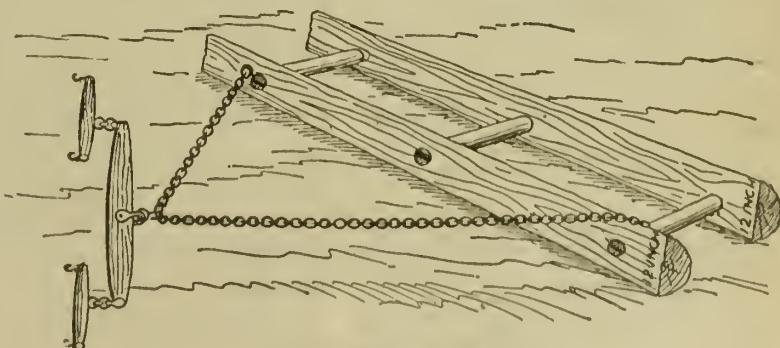
Public interest in the good roads movement has reached a height never before attained in Kansas, and it has now been demonstrated that good roads are possible without money. Instead of asking the Legislature for the appropriation of a large fund with which to aid the counties in their operations of building expensive roads, it is now proposed to ask that the Legislature appoint the State Agricultural College and the Engineering Department of the State University as a highway commission, whose duty it shall be to superintend the construction of roads, to give expert advice on methods and materials, and to conduct experiments along the lines necessary to the development of the public highways. This will require no increase in taxation, the creation of no new offices, and will allow each county to tax itself for good roads or not as the voters may decide.

It is impossible to foretell the vast amount of good that will be accomplished by this businesslike act on the part of the Santa Fe Railroad. One of the results that are immediate is shown by the renewed esteem in which the road is held by Kansas people.

Mr. King's ideas are embodied in the following description of how to make and use the split-log drag.

HOW TO MAKE THE DRAG.

In order to make the split-log drag in accordance with ideas gained by long experience, the following points should be noted. Select a log of some light wood, such as boxelder, elm, or the butt end of a telephone pole, but be sure to have it light and 12 inches thick. Cut it seven feet long if you have an ordinary team of horses, or nine feet long for an extra heavy team.



The Split-Log Drag.

Select a log with straight grain if convenient, or one with a right-hand twist to the grain. The latter is preferred by many of experience. Split the log in equal halves, and bore three two-inch holes through each half in such a manner that the rear half, when set on edge, will stand sixteen inches to the left of the front half. Secure some pieces of timber of proper dimensions, bethem down so they will fit the auger holes, drive them in securely, and wedge the ends. Both halves of the log must be set on edge with the flat sides in front, after they are fastened together 30 inches apart with the cross-pieces. The cut shown herewith is made from an earlier type of the split-log drag and does not show the logs arranged as just described. It

close together that they do not clear themselves of mud.

DRAG MADE OF SAWED STUFF.

If a suitable log is not readily available, the drag may be made of sawed planks which must be not less than 2 x 10 inches. A two-inch plank ten inches wide and twelve feet long may be sawed diagonally at the middle or cut "on the bias," as the ladies say, so as to obtain the required seven feet in length and reduce expense for lumber. When such timber is used it is found best to reinforce it by nailing a 1 x 6 on the rear side of each plank as it will stand when the drag is complete. The planks may then be fastened together in the same manner as (Continued on page 410.)

Editorial

THE HUSBAND'S INHERITANCE.

EDITOR KANSAS FARMER:—Please tell me if I have not misunderstood a statement in your paper of March 29 entitled "The Husband's Inheritance." You say "upon the death of the widow his estate descended to his own children." You do not mean to all his children do you? I had always understood that in such a case when the widow died, her property went only to her children.

SUBSCRIBER.

The case (52 Kansas Reports, page 392) mentioned in our answer under the title "The Husband's Inheritance" was one in which the man had offspring by each of his three wives and died three weeks prior to the death of his third wife. The opinion was written by Chief Justice Horton. The following is the syllabus of the opinion as published in the Fifty-second Kansas:

"Deceased in his lifetime was married three times. By his first wife he had one child, by his second wife he had one child, by his third wife, surviving him, he had five children. He died intestate in this State. At his death, one-half in value of his real estate, not necessary for the payment of his debts, descended in fee simple to his widow; the other half of his real estate descended to his seven children equally, being all of his children by his three wives. Held, also, that upon the death of the widow her estate descended to her own children."

A slight error occurred in printing an abridged statement of this syllabus in THE KANSAS FARMER of March 29. This full quotation makes the case plain and is explicit, bearing in mind that the husband inherits from the wife exactly as the wife inherits from the husband.

WARBLES IN COWLEY COUNTY.

EDITOR KANSAS FARMER:—I have read with much interest the views of Mr. Jackson and the theory produced by Chief Mayo concerning the warbles. I have watched the warble in cattle's backs all my life and thought everybody knew what made them, but perhaps I do not know. I think Mr. Jackson's view is nearer right than the theory produced by Mr. Mayo. In this locality we have what we call the big cow-flies. They are fully an inch long or even longer and of a dark gray color. Then we have another species that is black and just a trifle larger, but of identical habits. The black flies are not nearly as numerous as the gray flies. These flies make their appearance about the middle of July, become more numerous in August, and begin to disappear the latter part of September. They scarcely ever bother cattle in the middle of the day. They are worse from five o'clock in the evening until dark than at any other time, and are much worse where there is timber than anywhere else. Cattle hate them and run when these flies alight on them. When one of these flies becomes once located on a cow, it tries to bury itself in the hair as much as possible. It then bores its bill into the skin until it fills itself with blood. Just before leaving the animal it drops a tiny, clear drop from its tail, then leaves with difficulty with a buzz of its wings. I think this clear drop is the egg for the coming warble, and I believe the warmth of the animal causes it to hatch very soon, and it enters the place which the old fly made in the skin. It remains there under the skin until matured which is the next spring. It then cuts through the hide, crawls out, falls to the ground a thick, stubby grub with little sharp horns in rows around its body. I have sat and watched it wiggle and twist, but if in a soft spot of ground it soon buries itself in the ground to finish its career as a warble or grub. It returns in July or August a full-fledged, winged insect fully determined to try to keep up its family. I am satisfied with this theory as it is the result of very close observation. The warble looks like a bot that is found in a horse's stomach, but the warble is much larger when ready to go into the ground. According to Mr. Mayo's theory, the warble could be found all through the tissues of the body.

SUBSCRIBER.

One of the best authorities on entomology is Professor Vernon S. Kellogg of Leland Stanford University, California. He is the author of a book of 674 pages in which insects are described and their life histories traced according to the latest information developed at the time of the publication of this book

In 1905. On page 338 Professor Kellogg says:

"The bot-flies, warble-flies, or heel-flies of cattle, whose larvæ are found in small tumors under the skin, also [Professor Kellogg has just described the bot-flies of horses] have their eggs swallowed, and the young larvæ may be found in the mouth and esophagus. But from here they burrow out into the body-tissues of the host, finally coming to rest underneath the skin along the back. When the larva or grub is full-grown, it gnaws through the skin, drops to the ground, pupates, and, in from three to six weeks, changes to the adult fly."

Speaking of these flies, including bot-flies of horses and of other animals, Professor Kellogg says: "The flies are heavy-bodied, often densely hairy, banded insects, looking rather like small bumble-bees whose mouth-parts are so atrophied that they can probably take no food at all. They lay their eggs on the hairs or skin of their special host animal, and the larva on hatching bore directly through the skin and into the tissues of the host, or, as in the case of the familiar bot-fly of the horse and the heel-fly or warble of cattle, the eggs are taken into the mouth of the host by licking, swallowed, and thus introduced directly into the stomach, to whose walls the larvæ either attach themselves or through which they burrow into the true body-cavity of the host."

These descriptions by the best authorities in the world are the results of the most careful observations. They are not derived from theories but from investigations. The editor suggests that stock-owners interested trace the transformations with more care and continuity.

In combating any kind of pest, it is important to know accurately its life history. Taking the controversy about warbles as an example, the cattle-owner who fights the large flies described by our correspondent, for the purpose of reducing the number of warbles is probably wasting his effort. If, however, he can prevent the heel-flies from depositing their eggs, or destroy the vitality of the eggs before the cattle lick them off, he will be working directly against the pest.

FREIGHT CHARGES—WELL DRILL.

EDITOR KANSAS FARMER:—I am a reader of THE KANSAS FARMER and would like to ask a few questions.

I moved from Girard, Crawford County, Kansas, to Plains, Meade County, Kansas. I chartered a car from the Frisco people. I left Girard on February 14, and reached Plains on February 17. My freight weighed 24,500 pounds. I was charged \$98 for the trip. It seems to me that it was a very large price. Can you give me information in regard to the matter? I understand that the freight rates on the Frisco were cut about the middle of last month.

Can you give me any information about how and where to get a well-drill? I want to drill a well. How much will it cost to get a cheap drill? I will have to drill about one hundred and twenty feet. R. J. BURDICK.

Meade County.

The writer called upon the division freight agent of the Rock Island railroad with reference to the freight charges mentioned by this correspondent. This official went into a very full examination of the rates assuring the writer that if any error had been made it would be corrected. He found, however, that no overcharge had been made. No special reduction on this class of freight has been offered.

It will be wiser for our correspondent to employ some one who has a well-drill than to buy a drill and accompanying outfit with which to drill the wells that will be needed on one farm. If, however, he is determined to have a well-drilling outfit he should write to Williams Bros., Ithaca, N. Y., whose advertisement is running in THE KANSAS FARMER.

THE STOCK EXCHANGE DECISION.

A decision of the Kansas Supreme Court affecting trusts was handed down last Saturday. The case is one affecting the Kansas City Stock Exchange which originally is held to be a trust under the laws of Kansas, and as such is rendered incapable of doing business in this State.

The decision of the court was rendered in the case of the State against Charles L. Wilson. Wilson was arrested for selling mortgaged cattle. He was tried, convicted, and sentenced to five years in the penitentiary. He appealed the case to the Supreme Court, and made a showing that he had attempted to prove in the lower court that the exchange was a trust. The lower court refused to admit the evidence, and the

Supreme Court reverses the decision and orders that the case be retried. In effect, the Supreme Court declares that the showing that the exchange is a trust is a good defense for the defendant. Justice Mason wrote the opinion, and on the subject of the character of the exchange he wrote:

"An association of persons and corporations engaged in the business of buying and selling live stock and practically controlling that business at the place of operation, which has a by-law forbidding its members to buy or sell live stock for others without charging a commission therefor of at least 50 cents a head is a combination to carry out restrictions in full and free pursuit of a lawful business, and in virtue of that fact is a trust within the terms of chapter 265 of the laws of 1897."

"The charging of a commission for services in the purchase of live stock for another, by a member of such a trust in pursuance of the by-law referred to, is an act made a misdemeanor by that statute, and a contract to pay a commission exacted under such circumstances is void because made in violation of law."

"A note and mortgage given for a consideration, a part of which is unlawful because based upon a transaction made criminal by the statute, are wholly void."

"In a prosecution under an information charging the obtaining of money by false pretenses through selling, as clear, cattle that were in fact mortgaged, it is competent for the defendant to show in defense that the mortgage relied upon by the State, although fair on its face, was void by reason of being based in part upon a consideration made illegal by the anti-trust statute."

THE Y. M. C. A. AT THE STATE AGRICULTURAL COLLEGE.

THE KANSAS FARMER of last week gave an illustrated description of the proposed Y. M. C. A. building at the Agricultural College. This was accompanied by an account of the efforts by which a large portion of the money needed for the erection of the building has been raised, and continued with an appeal to farmers and others to contribute the amount still needed to complete and furnish the building. Of this latter amount it is now announced that \$300 has been subscribed. THE KANSAS FARMER is willing to receive and acknowledge subscriptions and will print the names of subscribers to this worthy enterprise. The money need not accompany the subscription, but it is well to designate a date or dates on which it will be paid.

Professor A. M. TenEyck, whose writings have made him well known to every reader of THE KANSAS FARMER, is chairman of the board of control.



A. M. TenEyck,
Professor of Agriculture, Kansas State Agricultural College, Manhattan, Kansas.

His level-headed influence is ample assurance of judicious use of all funds. Following is a letter which Professor TenEyck addresses to his thousands of friends among the farmers of the West.

My Farmer Friend: Perhaps you are not acquainted with the efforts which we have been making at the Kansas Agricultural College for the past two years with reference to raising a certain sum for the construction of a Y. M. C. A. building for the Agricultural College students. You know something of the work of the Young Men's Christian Association in the cities and colleges of the land. It is a splendid organization and is accomplishing a grand work in developing Christian citizenship and in raising the standard of manhood in our colleges and cities. It is a necessary organization in every university and college.

We have a strong Y. M. C. A. organization at the Agricultural College, but the students have been hampered by not having proper accommodations in the way of buildings and equipment for carrying on the work of the organization. The movement for raising a certain sum for the construction of a suit-

able building to be the home and headquarters of the Y. M. C. A. of this college was begun about two years ago. It seems that we have raised as much by local subscription as it is possible to raise, and we will require at least \$10,000 more to be subscribed before we may begin the construction of the building. We believe that the amount still required ought to be contributed by the people of the State, and a large part by the farmers of Kansas.

It is proposed that the KANSAS FARMER, the Mail and Breeze, and the Farmers' Advocate raise \$10,000 by opening subscription lists. The purpose of this letter is to call your attention to these lists now running in these papers.

The Agricultural College is supported entirely by the State and the United States; no individual donates anything for its support. The State, however, contributes nothing toward carrying on religious work or toward the construction of buildings for that purpose. Here is an opportunity for the farmers of Kansas to show their appreciation of the splendid work which the Agricultural College and Experiment Station is doing.

The writer is chairman of the Y. M. C. A. board of control and is personally interested in seeing this building proposition succeed. Such a movement ought to receive the hearty support of the farmers of Kansas, and the friends who assist in this movement will receive the appreciation of the Agricultural College board, faculty, and students as well as the commendation of all friends of the Agricultural College and the Y. M. C. A. throughout the State.

Yours very truly,

A. M. TENEYCK.

Following is a summary of subscriptions thus far received:

695 Previously acknowledged... \$22,332

3 Subscriptions, \$100 each.... 300

698 Subscriptions \$22,632

The amounts subscribed have ranged from \$1 to \$1000. None need hesitate because the amount he gives is small. Send to THE KANSAS FARMER, the Mail and Breeze, or to the Farmers' Advocate, Topeka, or to General Secretary W. W. McLean, Manhattan.

The convention of Southwestern interests to be held at St. Louis will convene in the Mercantile Club, corner of Locust and Seventh streets, at 10 o'clock Monday morning, April 10. Delegates, upon arriving at St. Louis, are requested to call at the office of the Business Men's League, in the Commercial Club, to register and receive badges. The banquet will be in the Jefferson Hotel, corner of Locust and Twelfth streets, at 8 o'clock Tuesday evening, April 17. A reception committee will receive and seat the guests as they arrive at the hotel. The dress will be informal.

The Farmer's Cooperative Shipping Association held its annual stockholders' meeting last week at Topeka. The former officers were reelected. It is stated that last year's business paid less than expenses; that it costs the association about a cent a bushel more than it costs the individual shipper to market grain; and that there was considerable dissatisfaction among the stockholders. The business of the association was transacted behind closed doors so that unfavorable reports may have been circulated without sufficient foundation by members of a minority faction.

Table of Contents

Alfalfa for steers.....	406
American Royal, about the.....	406
Club President, the.....	415
Contentment (poem)	412
Corn-Stalks as fertilizer.....	404
Corn in high altitudes.....	416
Easter Morning (poem).....	414
Easter Thoughts.....	412
Farmer's Elevator Companies.....	411
Farm management, successful.....	403
Fleetfoot, the autobiography of a pony.....	413
Freight charges.....	402
Foot-Path to peace, the.....	412
Fruit-Grower's wife and babies, and the automobile.....	419
Good road special, Santa Fe.....	401
Grape, growing of the.....	418
Grape-vine diseases, disastrous.....	404
Hessian Fly, the.....	404
Hessian Fly and other parasites, import and enemy of the.....	404
Husband's Inheritance	402
Judging Poland-China swine and use of score-card.....	406
Liquid manure, septic tank for.....	423
Lord's Day Week, the.....	423
Manure worth per ton, what is barn-yard.....	416
May-Fly, a.....	414
Milk, food and quality of.....	423
Millet, Jean Francois.....	415
Night Soil.....	404
Our World (poem)	412
Plant the trees, children, (poem)	413
Poultry Pointers.....	420
Proper food and feeding.....	412
Profitable dairy cow, the.....	422
Shell material, good.....	420
Show-room and exhibition poultry, training for the.....	420
Stand against lice, making a.....	421
Stock exchange decision, the.....	402
Sunday School lesson.....	415
Temperance Union Convention.....	415
Topeka Continental Sunday, our.....	412
Variety test.....	416
Vermilion, get rid of.....	420
Veterinary Department.....	426
Warbles in Cowley County.....	402
Wet food for chicks, effects of.....	420
Y. M. C. A. at the Agricultural College.....	402
Y. M. C. A., students opinion of the	411

Agriculture

Successful Farm Management.

W. J. SPILLMAN, UNITED STATES DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C., BEFORE THE KANSAS CORN BREEDERS' ASSOCIATION, JAN. 23, 1906.

The average yield of wheat in the United States is only about thirteen bushels to the acre, while the average yield of corn is about twenty-three bushels. When we stop to think that half of the farmers who grow these crops produce less than average crops, it is easy to see that the average farm does not pay. Frequently we find two farmers side by side, one of whom barely makes a poor living, while the other makes good money. We say that one is a poor manager and the other a good manager. Some men are born good managers. There is a large number of farmers, however, who can become good managers, and doubtless a number who never will under any circumstances, but it is certainly worth while for us to consider a few of the fundamental principles underlying good management on the farm.

CROP ROTATION.

In the first place, a well-planned rotation of crops is essential. The average farmer gives little or no attention to crop rotation, and has to replan his work every year. He frequently grows the same crop year after year until the land is worn out, badly infested by weeds, and the soil becomes filled with insect pests and fungus diseases that prey on the crop grown. One year he may have twenty acres of corn and another year sixty acres. He thus frequently finds himself short of help at some seasons of the year and with nothing to do at other times. The work of a farm should be so planned that the farmer and the laboring members of his family, as well as the hired men if there are any, can find something profitable to do every day in the year. Work that can be done inside in wet weather should be saved up for rainy spells, and the farmer should plan so closely that he will never be caught napping and thus required to do a lot of work that could be just as well done at times when the main work of the farm is not pressing. A well-ordered rotation of crops utilizes the full possibilities of the soil; that is, it keeps the fields busy growing something all the time. It distributes the work throughout the year, thus enabling the farmer to hire labor by the year, a much more satisfactory plan than hiring several men for short periods. The changing of the crop on the field will also cause yields to be larger, and there will be less trouble from weeds and insects. Wherever the same crop is grown continuously on the land, a lot of weeds that are adapted to growing with that crop will creep in and make the land foul with their seeds.

USE OF FERTILIZERS.

While the well-planned rotation is essential to good management, it is just as essential that a considerable portion of what is raised on the farm be fed to live stock and the manure returned to the land. Unless this is done the land will eventually wear out. It may be stimulated for a while with commercial fertilizers, but even the use of fertilizers without manure, or other means of stocking the soil with humus, will hasten the exhaustion of the soil. There is room for the development of all kinds of livestock farming in Kansas. It is possible to keep up the stock of humus in the soil by plowing under occasional green crops, but we do not know as much as we should like to know about the value of this practice.

PRODUCTS FOR FAMILY USE.

Another essential element in successful farming is the production on the farm of as much of the food required by the family as is possible. In nearly all parts of your State a large variety of garden vegetables can be grown with very little labor and every family on a farm should maintain a kitchen garden that will grow all of the vegetables, potatoes, and the like, the family can consume. If there is a little surplus it can frequently be sold in local markets to advantage, or it can be consumed by the poultry, pigs, and cows. Every farm should have at least enough fruit to supply the family with an abundance of this healthful food at all seasons of the year. Every farm should also keep poultry enough not only to supply what the family can consume, but to pay at least the grocery bill. A well-kept garden, a

small kitchen orchard, and a small flock of poultry will greatly enhance the standard of living on the farm and enable the farmer's family to enjoy the good things of life in a way that is impossible to those who live in cities.

PROPER PREPARATION FOR MARKETING.

Another important item in making the farm profitable is the proper preparation for market of what the farmer is to sell. Some time ago I was talking with a commission man in St. Louis, and he told me of an instance where a certain firm in Southern Missouri sent a lot of peaches to market at a time when there were twice as many peaches on the market as there was any demand for, and prices were entirely demoralized. Nevertheless, this particular consignment of fruit sold for good prices, simply because it was the most attractive fruit on the market. The attractiveness of an article properly prepared for market is more than half the battle in selling it. No matter what the farmer has to sell, if it is the best on the market it will always sell above market prices.

MANAGEMENT OF SOIL.

Another very essential thing in making a farm pay is the management of the soil. A large proportion of farmers plow three or four inches deep. This is a great mistake. Nothing wears out the land sooner than to have only the surface three or four inches pulverized by the plow. A good many farmers have been misled by their own experience with deep plowing. It is a well established fact that when land is plowed several inches deeper than it was ever plowed before—this is particularly true of land that has been in cultivation for a good many years—it will not yield much the first year, and this has led a good many farmers to think that deep plowing was not beneficial. Ordinarily speaking, the best plan is to plow a little deeper every year until a depth of nine or ten inches is reached. After that fall plowing should always be deep and spring plowing should be from six to seven inches deep. It is important, too, particularly if the soil is of rather a heavy type, not to plow when it is either too wet or too dry. If a heavy soil be plowed dry, the farmer has simply a mass of clods to deal with during the remainder of the season. If it be plowed too wet, a good deal of it is puddled, and a few dry, hot days will almost convert it into brick-bats. Plowing should be done, if possible, when the land is in condition to break up mellow. In spring plowing the harrow should follow the plow immediately in order to get a good pulverization of the surface. This is not so important in fall plowing, because the freezing and thawing of the winter will melt down the clods. Not only is it important to plow properly, but the surface should be put in good condition for receiving the seed. This work is usually done with the harrow. If the plowed land has lain for several months before the seeding is done, the disk-harrow is a very useful implement in pulverizing it, but on freshly-plowed land that was in proper condition to plow, a disk-harrow is unnecessary.

Farmers who have been plowing shallow for many years find a stratum of hard pan just below the plowed stratum. A good many attempt to break up this hard pan by subsoiling, but it is doubtful if subsoiling ever pays. The object of plowing is to mellow up the soil and incorporate humus into it. Subsoiling simply opens up air spaces deep in the soil, and it does very little, if any good. The proper thing is to plow deep.

MISTAKES IN FARMING.

One of the worst mistakes a farmer makes is in working too many hours a day. In my boyhood there was a neighboring farmer who in plow time would work from four o'clock in the morning till nine o'clock at night. He was a poor man and thought he had to do this or starve. Of course, he never had time to read the papers, and he knew nothing of the improvements that were going on in the methods of farming. He plowed two or three inches deep and raised six or seven bushels of wheat to the acre. Most of his horses died of starvation and overwork, and in two years he had squandered a patrimony inherited from his father and left the country in a covered wagon with two cow-belts which were only called horses by courtesy. On the other hand, I know a farmer who has dug a farm out in the State of Washington, in a section where it would cost at least \$200 an acre to clear the land if the work had to be hired. With the exception of one hired man for six months when he first began clearing, this man and his three sons have cleared up seventy acres of land, forty

for the plow, and the remainder is in condition to furnish good pasture. Last year this farmer sold \$2330 worth of butter, a little over \$2000 worth of eggs and poultry, and about \$400 worth of pork; in all, a little over \$4700, with no labor bill to pay. This farm has always been run on a ten-hour plan. They go to work at 7 o'clock in the morning, and when they come in to supper at 6 o'clock the day's work is ended, and this has always been the case. The owner of this farm takes several farm papers and studies them carefully; his boys study them too. Not only that, but his wife and daughters, who look after the chickens, are recognized as authorities on the subject of poultry, and the farmer himself now commands a good price for all he will write for the agricultural papers. His success has largely been due to the fact that he has taken time to study the literature of his business. Unless a farmer is also a born trader and gets ahead by cheating his neighbors who do not know the value of the things they have to trade or sell, he must be a student in order to make a big success on the farm.

On the other hand, a good many farmers do not work enough. There are certain very toothsome fish that have to be caught; or there are squirrels and turkeys going to waste that must be looked after just at the time of year when the spring work is pressing. Even when they do work they frequently do not work to good advantage. The work of the farm should be planned far enough ahead so that every day's work may be made to count the most possible. This is where a systematic rotation of crops comes handy. It enables one to plan the work ahead.

Another mistake which farmers make is to allow weeds to grow in their crops. I once had a neighbor who insisted that he saved a great deal of work by letting all the weeds in his corn-field sprout and then killing them at one plowing. He did save work at both ends of the line, because his system required less plowing and also saved a great deal of work in gathering his corn in the fall. In those sections of the country where the rainfall is plentiful it has been pretty well proven that the main object of tillage is to kill weeds. Every weed that is allowed to get six inches high in a corn-field reduces the size of the ear of corn on the nearest corn-stalk. The best plan is to kill every weed while it is sprouting. This can be done simply by stirring the soil at the proper time. After the roots of a weed get three or four inches deep into the ground, it can no longer be killed in this manner. The best plan is never to let the weeds get a start.

One of the mistakes that has been made in every good section of the United States when it was first settled has been the growing of grain-crops continuously on the land. This has led to the spread of certain weeds and insects, and has worn out the soil. In my boyhood it was a common thing for farmers in Southwest Missouri to sow wheat year after year on the same field. To make matters worse, instead of plowing up the stubble soon after harvest and thus putting it in good condition for the next wheat crop, they would wait until foxtail and rag-weed had made a growth two or three feet high on the land and left enough seed for four or five wheat crops in the future. This is one of the cases where promptness saves future work.

Another mistake which is common throughout the Middle West, where timothy and clover are grown for hay and pasture, is to leave the meadow down too long. Clover usually disappears in one or two years, and the yield of timothy becomes very much reduced. Not only that, but all kinds of weeds make their appearance, and frequently half of the weight of the hay consists of weeds. It seldom pays to keep a meadow of this kind down more than two years, and on our farm in the edge of Newton County, Mo., my brother and I leave the meadow down only one year. This gives us good hay and large yields.

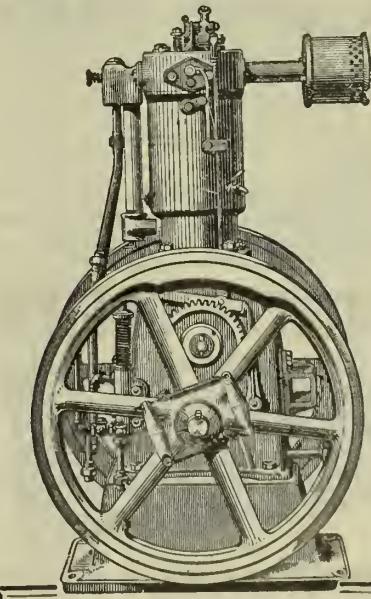
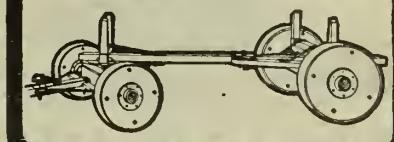
Perhaps the most common fault with farmers is that they do not study their business closely enough. A few years ago there was perhaps some excuse for not reading a great deal of agricultural literature because so much of it was theoretical and impractical. There is still, of course, a good deal of agriculture literature that is not worth the farmer's while to read. On the other hand, there are certain farm papers and books which a farmer can not afford not to read. The man who makes a great success at anything is always a thorough student. In addition to reading at least two or three good farm



Every farmer knows the labor-saving advantages of a low-down, wide-tire, short-turn, roomy wagon. The point he wants to decide is whose make will give him the most service. If he will investigate the Farmer's Handy Wagon that is made in Saginaw, his own good judgment will direct him to a wise purchase. We can't give detail descriptions of it here. We can't tell you all the reasons why it is better value for the money, why it lasts longer, carries bigger loads, requires less repairs, but all this and more is in our new 1906 wagon catalogue which we will send free on request. A postal brings it and it will pay you to send for it right now. It's full of practical wagon buying advice. Sold by all dealers.

FARMER'S HANDY WAGON CO.,
Saginaw, Mich.
Branches, Kansas City and Des Moines.
Also makers of Farmers Hay and Stock Raeks and All-steel Frame Silos.

WOOD OR STEEL WHEELS



Gasoline Engine Superiority

When a man invests in a farm power, he owes it to himself to get the best that can be bought for the money.

The modern business farm can no longer be successfully operated without a power of some kind.

The best, most economical, and safest farm power is a gasoline engine.

The best engine is the

I. H. C. Gasoline Engine.

Why? Well, because it's so simple, easily kept in order and operated definitely.

It develops the full rated horse power and sustains it against the heaviest load.

It is safer, cheaper and more efficient than steam power.

It is adaptable to any and every use requiring a power.

Among its many uses may be named:

Shelling, Husking and Shredding Corn; Grinding Feed; Cutting Dry Fodder and Ensilage; Pumping; Sawing Wood; Separating Cream, Etc.

I. H. C. engines are made in the following styles and sizes:

Vertical, 2, 3, 5 Horse Power.
Horizontal, Portable and Stationary, 4, 6, 8, 10, 12, 15 Horse Power.

If interested in powers in any way, go to the International Local Agent and have him show you the I. H. C. gasoline engine, and supply you with catalogues, or write for further information.

**INTERNATIONAL HARVESTER COMPANY
OF AMERICA, CHICAGO, ILL., U. S. A.**

(INCORPORATED)

WHAT DO YOU SAY?
Several hundred thousand farmers say that the best investment they ever made was when they bought an
Electric Handy Wagon
Low wheels, wide tires; easy work, light draft. We'll sell you a set of the best steel wheels made for your old wagon. Spoke united with hub, guaranteed not to break nor work loose. Send for our catalogue and save money.
ELECTRIC WHEEL CO., Box 46, Quincy, Ill.

SCALES

ALL STYLES
LOWEST PRICES
PITLESS
30 DAYS
FREE TRIAL
FREE CATALOGUE
AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

\$50.00 Split Hickory

SPECIAL TOP BUGGY TO ORDER
2-year guarantee. Sold on 30 days free trial, 100 points of superiority. Tell us what style vehicle you want. Send for 1906 catalogue free.
The Ohio Carriage Mfg. Co.
H. C. Phelps, Pres.
Station 251
Cincinnati, Ohio

Of all the hay we handle your balers make the nicest bales of them all. F. W. Taylor & Co., Kansas City, Mo.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1084 Jefferson St., Topeka, Kansas

THE 20TH CENTURY GRADER

Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks; Levels Land for Irrigation, Cuts Ditches, Cleanse Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled. Descriptive Catalogue FREE.
The WHITE CITY GRADER CO.
Box F-7
WHITE CITY, KAN.

DROUTH DEFIER

TOPEKA FOUNDRY & FOUNDRY COMPANY
TOPEKA, KANSAS

NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS
When writing mention Kansas Farmer.

Before you buy that Manure Spreader

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive

Appleton Manure Spreader

has all these important features and many others equally as important. Write to-day for free catalogue and special prices and terms.
APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

papers regularly, every farmer ought to get the bulletins from his State Experiment Station and some of the bulletins from the United States Department of Agriculture. He should also attend the farmers' institutes and take an active part in them. By these means he can keep himself informed concerning progress that is being made in the great industry he represents, and will be in position to improve his methods as fast as new facts are developed.

Corn-Stalks as Fertilizer—Night Soil.

There are about 40 shocks of corn-fodder no this farm, about one-half has been fed out. What is the most convenient way of decomposing the stalks so they can soon be returned to the soil as fertilizer?

What are the proper things to mix with night-soil for use in the garden? Wood-ashes and forest-tree leaves are about the only things I could get. What proportion of these three mixed together would give the best results, and what length of time should be allowed for composting?

FRANK S. GRISWOLD.

Johnson County.

The corn-stalks might be spread at once on pasture land, or if you do not have such land available, spread thinly on wheat or small grain which has just been sown. Used in this way, the stalks will not be in the way and will give some little benefit to the land, both in the way of a mulch and as they gradually decay some humus and nitrogen will be returned to the soil. The fertilizing value of corn-stalks is not great and it would not seem to me advisable to decompose the stalks previous to using them as fertilizer. Of course, the stalks could be thrown into a pile and allowed to absorb the rains during the summer and thus gradually decay. However, corn-stalk manure is always disagreeable to handle and you will probably be able to handle the stalks from the shock easier and at less expense than you will ever be able to handle them again.

Wood-ashes are not very desirable to mix with night-soil; air-slacked lime is better. The wood-ashes decompose to some extent the nitrates of the fertilizer. The forest-tree leaves are all right. By adding a little road dust or dry dirt, leaves and night-soil will make as good a combination for hauling for garden fertilizer as anything you can use. You will best be able to judge what proportions to use to secure the best mixture. Usually it would not appear to me desirable to go to any great trouble in composting this night-soil since you really have only a small quantity of the fertilizer.

If it could be hauled out into the field and spread thinly and plowed under, perhaps this would answer your purpose and be a desirable way to handle the fertilizer. Any other fine, well-rotted manure would be as good for the garden.

A. M. TENNEYCK.

The Hessian Fly.

The following and other enthusiastic statements concerning a parasitic enemy of the Hessian Fly possess so much importance, if true, that THE KANSAS FARMER asked Professor Tucker for a discussion of the subject. His excellent reply follows the clipping:

"The passing of the Hessian fly has for years been the dream and cherished hope of the wheat-grower. As the wheat crops increased and the demand and prices became more of an incentive to increased acreage and yield, the threatened destruction of crops by this insect pest became more pronounced and alarming over the winter-wheat areas. The fighting of the Hessian fly by all scientific and mechanical methods and contrivances that scientists could invent did not offer much encouragement of perfect immunity from the pest, while it added labor and embarrassment to the best interests of the successful cultivation of the crop.

"The Department of Agriculture at Washington, D. C., has discovered through its agency an insect enemy of the Hessian fly which promises its hasty and permanent destruction. The tiny insect upon which the Government entomologists are depending to check and possibly destroy completely the Hessian fly is the *Polygnotus hiemalis*, and it is indigenous to Montana, North Dakota, and Idaho, where it was discovered during the summer of 1905 by G. L. Reeves, of the bureau of entomology of the Department of Agriculture, while on field work connected with investigation of the Hessian fly.

"The *Polygnotus hiemalis*, while boasting of a formidable polysyllabic name, is of almost microscopic proportions. To the unaided eye it appears hardly larger than a pin point, and a Hessian fly attacked by hundreds of the parasites looks as if it had been

sprinkled with pepper. When the parasite is brought under the lens of a powerful microscope, it is discovered to have a pair of powerful mandibles and six strong gripping legs by means of which it is able to satisfy its lust for Hessian steaks and delicacies offered by its doomed host. So voracious is its appetite and so effective is its warfare upon the Hessian fly that the great wheat-pest has been practically exterminated in the districts it has invaded where the newly-discovered parasite is indigenous.

"This new field for importation and distribution of the newly-discovered insect will offer the experiment stations throughout the winter-wheat States employment in the propagation of the *Polygnotus hiemalis*. It is to be hoped that they are not too sensitive to changes of location, and will have to undergo a gradual process of acclimation before they will be ready to enjoy feeding on the Hessian fly, as it may be found in the various localities where it does its work."

An Important Enemy of the Hessian Fly and Other Parasites.

BY ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

Ofttimes exaggerated and otherwise faulty accounts are printed in newspapers and other journals regarding investigations that promise to be of practical value if applied to farming practice. Perhaps these articles are written with the best of intentions towards spreading the news, but the writers jump at unwarranted conclusions and probably err from a lack of sufficient knowledge of the subject or incomplete understanding of facts. Such appears to be the case recently noticed concerning reports of an important enemy of the Hessian fly. As efforts have been made by the entomologists of the U. S. Department of Agriculture to prove how effective this enemy can act, their opinion was sought in order to determine what statements can be relied upon. The reply received which answered a number of questions is here quoted:

"Bureau of Entomology,

Washington, D. C., March 23, 1906.

"The parasite of Hessian fly to which you probably refer is *Polygnotus hiemalis* Forbes. Please absolve me from any claims or statements made in newspapers. This is a very common parasite, but if it ever made any promises to exterminate the Hessian fly we have never received them, certainly not in Montana, where no wheat is grown, and I do not believe in the Dakotas. Furthermore, Mr. Reeves wishes to be absolved from all responsibility of its discovery. As you probably know, this was described by Professor Forbes a number of years ago.

"It is an exceedingly valuable parasite, and I have observed it overcoming an invasion in the fields; that is to say, fall wheat that had been killed by Hessian fly was collected from widely different localities and placed in breeding in an insectary. In some cases the number of these parasites reared outnumbered the Hessian fly reared, two or three hundred to one. Part of these could, of course, be accounted for from the fact that quite a number of parasites may be developed within a single flaxseed, but it occurs too often to be a mere theory that where Hessian flies are excessively abundant in the fall sometimes very few emerge in the spring, while swarms of these little fellows come forth in their stead.

"I am not certain of its occurrence in Kansas, but think it quite likely that it occurs there. This is the one that was sent from North Dakota to Kentucky, Tennessee, and also to California.

"So far as my own studies have gone, this is the most valuable of the several parasites of the Hessian fly.

"I presume that you can secure a figure of it by addressing the Bureau, although you may perhaps have to wait until a circular in which it is being used has passed through the press.

"Yours very truly,

"F. M. WEBSTER,
In charge Cereal and Forage Plant
Insect Investigation."

The official account of the Government experiment in disseminating these parasites appeared in Dr. L. O. Howard's report for 1905, and reads as follows:

"Introduction of parasites.—By keeping the whole wheat-growing area under observation, carefully noting the increase and abundance of grass and grain insects in one section and the decrease on account of excessive parasitism in another, it may be possible to transfer large numbers of beneficial

MIXED FARMING

Wheat Raising Ranching

Three great pursuits have again shown wonderful results on the

FREE HOMESTEAD LANDS

of

WESTERN CANADA

Magnificent Climate—Farmers plowing in their shirt sleeves in the middle of November.

"All are bound to be more than pleased with the final results of the past season's harvests."—Extract.

Coal, wood, water, hay in abundance—schools, churches, markets convenient.

This is the era of \$1.00 wheat.

Apply for information to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.

Mention this paper.

Wire Fence 29c

48-in. stock fence per rod only
Best high carbon coiled steel spring wire
Catalog offences, tools and supplies FREE
Buy direct at wholesale. Write today
MASON FENCE CO., Box 62, Leesburg, Va.

FENCE MADE

STRONGEST
en-tight. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalog free
COILED SPRING FENCE CO.,
Box 255, Winchester, Indiana.

LAWN FENCE

Made of Steel. Lasts a life-time. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free. KITSelman Brothers, Box 399, Muncie, Indiana.

\$10.00 Sweep Feed	\$14.00 Galvanized Grinder.
We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.	
CURRIE WIND MILL CO., Topeka, Kansas.	

CEMENT FENCE POST or Building Blocks
Crouch \$10 Machine
Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.
Ellsworth Crouch, Oakland, Kansas

WELL DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

Two Years Guarantee

See illustration of a manure spreader.

AND A BARGAIN

Send direct to our factory for catalog, make your selection (many styles) and we will ship it, freight prepaid, for you to try 30 days. If it doesn't stand the test, if quality isn't high and price low (about half local dealers'), if you are not satisfied, ship it back at our expense.

You Deal With the Factory

when you buy our vehicles. Not a mail order house or agent. And you can buy just as safely from us as from any local dealer. Be sure you send for catalog. We make it all plain there. We pay the freight. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

Insects from the locality where they have nearly or quite finished their task of suppression to another region where an outbreak is in the developmental stage. During the season two large consignments of Hessian-fly-infested wheat-stubble, determined by breeding during the winter months to be strongly parasitized, were transported from North Dakota to Western Kentucky and Tennessee, where a serious outbreak of Hessian fly was then in progress. The results have not yet been determined, but the line of experimentation is a worthy one."

We hope to hear of the successful outcome of these experiments from the bureau itself before long. The discovery of this species of parasite dates back many years, although reputed in the clipping at hand to be only last season. In Bulletin 45, U. S. National Museum, its history is thus traced by Dr. W. H. Ashmead:

"This species seems to have been first reared by Dr. Riley from specimens of the Hessian fly (*Cecidomyia destructor* Say), August 16, 1876, received from Blair, Nebr. It has, however, since been bred from the same fly by various persons in the Western States. Professor Forbes reared it in 1888 at Champaign, Ill.; Professor Cook, of Agricultural College, Mich., in 1890; and Professor Webster at Laporte, Ind., in 1889."

Its occurrence in Ohio was noted by Professors F. M. Webster and W. Newell in their report on insects of the year 1901, (published in Entomology Bulletin 31, U. S. Department of Agriculture), in the following manner:

"Wheat plants that had been killed last autumn by the larvæ of the fly were collected in quantity from many sections of the State and placed in the insectary in order to learn the probable condition of the fly in the fields in the spring of 1901. Only in two instances did we secure Hessian fly in great numbers. * * * In some instances we reared myriads of the little parasite *Polygnotus hemalis* Forbes, and the number of these left no doubt of their efficiency in checking the increase of the fly; but in some other cases we reared only very few parasites, and even less flies or none at all, so that it seems possible that there was also another unknown influence which tended to reduce the number of adult flies that emerged this spring."

In classification, this insect belongs to a family of the parasitic wasps called Proctotrypidæ, which, according to Professor Comstock, includes the smallest of all known insects. Many of them are small enough to live even within the eggs of other insects. In size, the enemy of the Hessian fly is, of course, much smaller than its host which is a tiny insect itself; the measurements of the adult parasite are given as .80 to 1.40 millimeters in length.

Our most beneficial insects are the hymenopterous or wasp-like parasites of which this enemy of the Hessian fly is an example. Numerous kinds abound everywhere and they not only prey on other insects, but also on each other. Caterpillars are especially susceptible to their attacks. However, they do not pounce upon and kill their prey at once by biting according to the idea conveyed by the newspaper articles—that is the method of attack by predaceous insects. Parasitism is a slower process of onslaught and is exemplified by any form which subsists largely by attachment on or directly within the body of another, during a part or whole of its life. With the hymenopterous parasites, the female selects her victim usually when she is in the larval or worm stage, though often in the cocoon or pupa, and by means of her piercer thrusts one or more of her eggs into the skin of the host. These eggs hatch out into grubs which burrow into the live body and feed on the blood of the host until their growth is attained. By this time the victim generally dies, but the parasites transform into adult flies either within or outside the body of the host. Their jaws are then used to gnaw their way out of the victim's body or to free themselves from their own cocoons, when formed externally. No matter how small some species may be, they are just as complete in structure as large insects. Except for a few wingless forms, they have four wings. The females apparently loose no time in hunting for victims on which to deposit their eggs, thus quickly producing another brood. Night-time is probably the period of greatest activity with the adults, for at such times I have captured great numbers of them either by sweeping herbage with a net or in collecting at lights. Then again, some species were reared in breeding experiments such as raising a colony of caterpillars in a cage, when parasites are liable to develop from them.

Not all the attention that they deserve has been given to these parasites, but recently a great number of specimens of these insects belonging to the collection of the University of Kansas were studied by a specialist with remarkable results in finding many kinds that are new to science. The notes and descriptions concerning part of them were published a year ago in the Transactions of the Kansas Academy of Science, (vol. 19), which report shows that our Western country is rich in new species. As fast as my own captures are reported, from material collected in Kansas and Colorado, more than two new species were found to one old species, or by actual count, 39 to 18. In one family called Ichneumonidae, 15 new species are credited to me as the collector; one is named after me and another after Manitou, Colorado, where it was found. In another family called Braconidae, 24 new species are described from specimens of my collecting, among which another namesake appears, besides one named after the State of Kansas and another after Wichita, Kansas where it was taken.

These Indian names with Latin terminations form curious combinations, as Kansensis, Wichitensis, and Manitouensis.

Since the collecting was mostly desultory, being done during spare time and on pleasure trips, the results are the more surprising; besides my attention was not given to parasites alone, but to all orders of insects, although I often made special efforts to collect minute forms. The locality, Lawrence, or Douglas County, Kansas, becomes prominent because most of my collecting was done here at home, when after my day's work in the museum, a change in the open air was afforded during evenings. I believe that innumerable unknown species of these parasites still remain to be captured almost anywhere.

As all these parasites enter into economic importance by reason of their agency in the limitation or suppression of more or less injurious hosts, the field for investigation in this direction seems to offer great possibilities, at least for a better knowledge of them and perhaps to some practical purpose. Possibly the control of destructive hosts can be effected through their agency by artificial means. Field agents are already engaged in special investigations in various States. Kansas has her troubles, too, with insects, and offers a good working field for several special investigators.

Water-Proofing Boots and Shoes.

To prepare a dressing that will render leather boots and shoes water-proof, and which is not injurious to the leather, leaving it soft and pliable, use oil and rubber as follows: Heat in an iron vessel either fish oil or castor oil, or even tallow to about 250 deg. Fahr.; then add, cut in small pieces, vulcanized or raw India rubber to the amount of one-fifth the weight of the oil, gradually stirring the same with a wooden spatula until the rubber is completely dissolved in oil; lastly, to give it color add a small amount of printer's ink. Pour into a suitable vessel and let it cool. One or two applications is sufficient to thoroughly water-proof a pair of boots or shoes for the season. Boots and shoes thus treated will take common blacking with the greatest facility.—Scientific American.

This actually appeared among the editorial notes in the Emporia Gazette: "This actually happened. A farmer's cattle broke into a neighbor's field of corn and the neighbor filed suit in a justice court. Appraisers appointed to assess the amount of damage done to the field of corn, on examination found that the cattle had been in that field but had not eaten an ear of corn because they couldn't reach it. They decided that no damage had been done and the suit was withdrawn."

From Nottingham, England, comes the description of a telephone apparatus designed to obviate the possibility of disease transmission by the usual mouthpiece. The construction is such that the mouthpiece is omitted altogether, and the receiving and transmitting apparatus is combined in a small metal case, shaped like a watch. This is held continuously to the ear, both in speaking and in listening, the transmitting microphone being made so sensitive that it becomes unnecessary to concentrate the sound waves on it by the aid of any mouthpiece such as is ordinarily used.

Make yourself a necessity to the world by what you contribute in the way of personal comfort, by what you are in embodying before men all that is gentle, generous, and pure.—M. Dane.

Use this American Manure Spreader



A MONTH FREE

TO PROVE ALL THE CLAIMS WE MAKE FOR IT

WE sell direct to you. We sell direct to you because we are able to give you much better value for your money than we otherwise could, and a better understanding of your machine than any one else could. We always keep in close touch with our customers. They tell us what our Spreaders are doing. Sometimes they surprise even us.

We find out just what it means to countless farmers to own a Manure Spreader that will double the value of every bit of manure put on their land. The American Manure Spreader will do this because it breaks up and pulverizes all the manure so that it mixes readily with the soil. It distributes evenly. Every square foot of land gets its share. This means a good crop all over the field. You don't find any "skinned" places in a field manured with the American Spreader.

But we don't ask you to take any hearsay evidence.

We want you to *find out for yourself* what our Manure Spreader will do.

So we make you this remarkable offer. We will send you one of our Spreaders on trial and prepay the freight.

Use it a month on your own farm.

If you find it exactly as we have represented, after the month's free trial, you can settle for the machine on terms convenient for you.

But if the American Manure Spreader is not what we claim, send it back at our expense. You don't owe us anything. The trial don't cost you a penny. The month's use you have had of the Spreader is FREE.

Could we do more to prove to you that the American Manure Spreader, is what we say? Would we dare to make such an offer if we didn't know what our Spreader will do? Remember—when you deal with us, you are doing business with an independent concern.

And you take as much time as you require to pay for the Spreader after you have used it **A MONTH FREE**.

The Spreader may earn its own cost, before we send us a shilling.

Will you be as fair with us as we are willing to be with you?

Will you send for information of our generous proposition today?

Even though you do not wish to buy now, send for particulars.

Some day you may wish to buy, and then knowledge of our New Selling Plan will come in handy. You will know how to save money.

If you will tell us how much land you own, and how many horses, cattle, sheep and hogs you keep, we will give you the Government statistics as to the value of your manure crop.

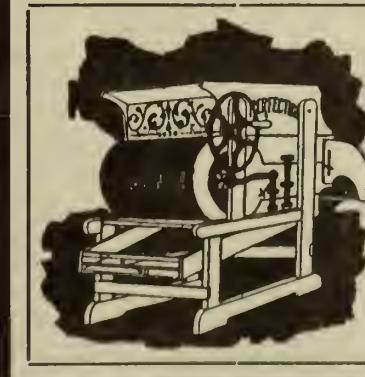
Write to us today. Put down this paper and write before the matter has a chance to slip your memory.

Address at once—

AMERICAN HARROW CO., 10133 Hastings St., Detroit, Mich.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: :



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

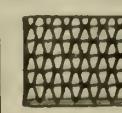
Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

LIGHTNING GASOLINE ENGINE
STATIONARY AND PORTABLE, 3 TO 25 H. P.
NEW PLAN FOR COOLING CYLINDER
Reduces Water Tank to a Few Gallons
Send for Catalog.—Special Farm Engines

KANSAS CITY HAY PRESS CO., Mill St., Kansas City, Mo.



Thirty-One Styles of Farm Fencing

Hold direct to consumers on thirty days trial
at wholesale prices. Catalogue free.

THE FARMERS' FENCE CO.
Melvern, Kansas.

Box 36.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 25, 1906—Shorthorns at Manhattan, Kans. F. M. Gifford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, DesMoines, Iowa, Manager.

October 20, 1906—W. R. Dawling, Norcastur, Kans. Poland-Chinas.

October 25, 1906—D. W. Dingman, Clay Center, Kans. Poland-Chinas.

Alfalfa for Steers.

EDITOR KANSAS FARMER:—I have been feeding 16 4-year-old steers for about three months on alfalfa hay and corn-meal. I am feeding corn-meal morning and night, 5 bushels a day, and alfalfa hay three times a day. Some of these steers have been bloating. This morning after eating their corn-meal and alfalfa hay, two of them were pretty badly bloated. I understand nearly everyone is feeding all the alfalfa hay his stock will eat with-

B. W. Harned, of Beaman, Judge L. L. Frost, of Mirabile, Mo., in a letter to the directors stated that the O. I. C. swine-breeders had made arrangements to participate in the show. The Poland-China breeders were not represented, but it was understood that they would come in. It is expected that the classifications will call for \$500 in cash prizes, in addition to a number of specials for each breed. To encourage the swine-breeders to make a large exhibit, General Manager Rust of the stock yards company announced that the pen rent would be reduced from \$3 to \$2 per pen.

Prof. R. J. Kinzer of the animal husbandry department of the Kansas Agricultural College made a plea for the students' judging contest. He said he had assurances from the Missouri, Kansas, Oklahoma, Texas, and Colorado colleges that they would send teams. The contest will be held on Saturday, October 6. Team and individual prizes will be awarded, the contest being open to all.

At the request of the shire exhibitors, separate classifications will be provided this year for Shires and Clydesdales. H. A. Heath, of Topeka, Kans., was selected as superintendent of the horse department. The prizes in this

the great breeders and improvers of our domestic animals that they were close students of animal form and conformation. They were not satisfied with a general knowledge but carefully noted the most minute points in their bearing upon other parts. This careful study and realization of the value of the points quite often regarded as unimportant gave these men clearer understanding and greater appreciation of the details of conformation. The great breeder is a close student of animal anatomy and has a thorough knowledge of the fundamental principles governing and influencing quality, symmetry, and the correlation of the various parts of the animal mechanism. A careful study along these lines plainly shows us that a perfect harmony must prevail throughout the animal economy if we are to have the highest utility with least friction of parts. The term conformation as applied to animal form should be used in its broadest sense, and should include the outside form in its relation to function, locomotion, and adaptation for specific purposes. There have been enthusiasts who claimed conformation to be an absolute index to function and adaptation. The experience of practical stockmen is oftentimes contradic-

Every Team Owner

should be prepared for the common ailments and hurts. Wisest plan to have on hand the approved remedy, the one everybody knows and endorses,

Kendall's Spavin Cure

For Spavin, Curb, Splint, Ringbone, Cuts, Wounds, Sores, Sweeney, Galls, etc. No equal in the world.

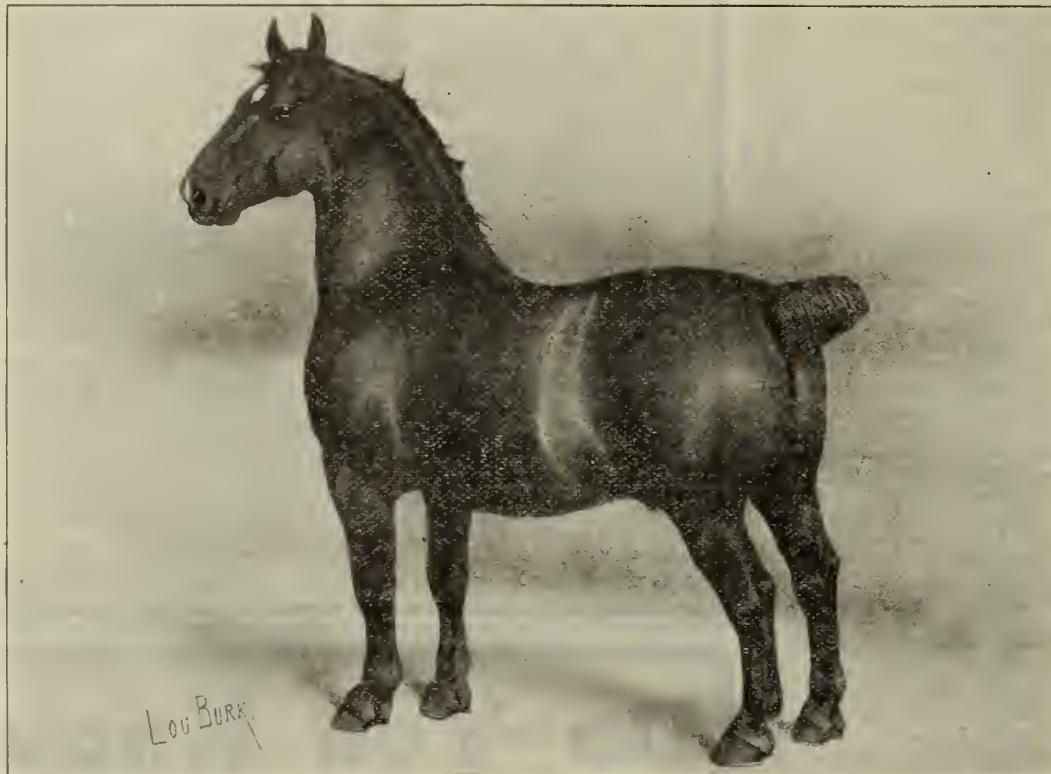
Cured All Ailments.
Albany, N. Y. 77 Park Ave., March 8, 1905.
Dr. B. J. Kendall Co.,
Enosburg Falls, Vt.

Gentlemen—Please send me a copy of your "Treatise on the Horse and his Diseases." I find your Kendall's Spavin Cure all right, I am employed by W. M. Whitney & Co., of Albany, and it has cured all ailments in our stables. Spavin, Curb, Ringbone and Hip Diseases, and other ailments.

WILLIE J. DAUGHERTY,
Coachman.

Price \$1; 6 for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. The great book, "A Treatise on the Horse," free from druggists or

DR. B. J. KENDALL CO.,
Enosburg Falls, Vermont.



MONTEVIDEO 3231.

German Coach. Color bay. A three-year-old quite well matured and a beauty. Owned by The Lincoln Importing Horse Co., Lincoln, Neb.

out danger, but our stock is bothering us a great deal. We had the same trouble last year. I would like to know the cause of it. My alfalfa, which was grown on upland, is very short and full of leaves. Is this the cause of the trouble? I think after this I will mix the alfalfa with straw.

Lincoln County. OLE NIELSON.

Answer:—When steers are on full feed with alfalfa hay for roughage, they will occasionally bloat. Your alfalfa is undoubtedly of very rich feeding value and I would suggest that you feed some other roughage in addition, as straw or good prairie hay. It would be safer, also, if you were feeding corn- and cob-meal instead of clear corn-meal.

I think you will find that, if you reduce the quantity of alfalfa somewhat, giving some other roughage to take its place, the bloating will cease.

S. C. WHEELER.

About the American Royal.

EDITOR KANSAS FARMER:—A strong show of breeding swine, a students judging contest, and an enlarged classification in the horse department will be the new features of this years' American Royal Live-Stock Show to be held at Kansas City, October 6-13. These, with many other important details, were passed upon at a meeting of the directors held at the Midland hotel yesterday.

The swine-breeders were represented by the following: N. H. Gentry, Sedalia, Mo., and L. E. Frost, Moberly, Mo., chairman and secretary, respectively, of the swine department; W. L. Addy, of Parnell, president, T. L. Williams, of Dawn, secretary, and C. B. Fagin, of Iathrop, director, of the Missouri Duroc-Jersey Breeders' association; and Green McFarland of Sedalia and

department will aggregate \$8,560, including \$400 for mules. A bar for the accommodation of the show horses is to be erected within the show-grounds.

Three night shows will be held this year. They will be on Tuesday, Thursday, and Friday nights.

JOHN M. HAZELTON,

Kansas City, Mo.

Judging Poland China Swine and Use of Score-Card.

PROF. G. C. WHEELER, BEFORE THE FARMER'S INSTITUTE AT CLAY CENTER, KANSAS.

In all live stock judging there are two faculties essential above all others, namely, observation and judgment. No man can successfully judge animals who can not quickly see the different points upon which he must base his final conclusions. While this faculty of keen observation seems natural to some, it may be greatly developed by practice and continuous use especially when this takes place under the direction of some thoroughly competent person.

It is also absolutely essential that an ideal be clearly present in the mind's eye in order that any deviation from correct form be quickly noted. This is one of the most difficult things to acquire in connection with forming correct conclusions as to animal form. It requires close observation and study, and considerable experience. After a clearly defined ideal has been fixed in the mind as a result of careful study and observation of the highest types and forms, it but remains for the keen eye to detect the various deviations from this ideal and render the decision in accordance with the amount and importance of the departure from the correct conformation.

ANIMAL FORM AND CONFORMATION.

We find as we study the work of

tory to this over-zealous claim, and consequently some have considered that the study of conformation is unimportant. It may be said that conformation is rather the result of function, and looked at from this standpoint its importance is more easily realized.

It is very important that a breeder be a skillful judge, in fact, a man who is not hardly merits the title of breeder even though his operations are with pedigreed animals. You gentlemen, who are striving to advance the value and general utility of the Poland-China breed of swine, realize that you can accomplish but little unless your knowledge of the conformation of your chosen breed is sufficiently accurate to enable you to see not only the defects of the living animal as produced in your herds, but those which the slaughter test alone will expose.

THE IDEAL HOG.

The market demands have much to do with moulding our ideals and a close study of the standards for the different breeds reveals the fact that in so far as the points relating to the real meat-producing parts are concerned they are almost identical. At present, the distinctly lard-type of hog is favored in the Central West and the Poland-China breed, as now produced, is admirably fitted to meet the requirements. It should be the steadfast aim of you breeders of this grand corn-belt hog, to adhere closely to correct ideals. You must not be satisfied to produce individuals as good as your parent stock. There is no stationary ground for the true breeder. There must be improvement; and this improvement must be harmonious and symmetrical. The charge is made that the Poland-China breed is not prolific.



Dipolene

WILL SAVE YOU DOLLARS

By preventing loss and sickness among your farm animals. Time to save is before loss occurs. Keep your live stock free from disease. DIPOLENE will do it. It kills disease germs, destroys ticks, lice, fleas; cures sheep scab, mange, eczema. Protects against mosquitoes, and keeps stock in a healthy, sanitary condition. It's easy to use, powerful, sure and pure; DEATH TO DISEASE but perfectly harmless to animals, hair, feathers or wool. A gallon makes 100 gallons dip. Write for price and FREE book, "DIPPING FOR DOLLARS."

MARSHALL OIL CO.,
Box 13, Marshalltown, Iowa.

Money Back

BE SURE AND

We will refund the money if Bickmore's Gall Cure does not cure collar and saddle galls while the horse works.

Bickmore's Gall Cure

is guaranteed to cure all chaps, brusies, cuts, grease heel, scratches or torn or scratched teats, etc., in cows. Take no substitute. See trade mark. Every horse owner can have our illustrated Horse Book and large sample box Gall Cure for 10 cents for postage on both. Write today, or ask your dealer.

Bickmore Gall Cure Co.,
Box 916
Old Town, Maine.

Lump Jaw

The first remedy to cure Lump Jaw was

Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in

Fleming's Vest-Pocket Veterinary Adviser

Most complete veterinary book ever printed to be given away. Durably bound, indexed and illustrated. Write for a free copy.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ills.

If this be true, it is up to you breeders to correct it, for of what avail is it to develop the finest type of hog that grows if it is unable to reproduce at a profitable rate? You must become breeders in the highest sense and in order to do this, as already stated, a thorough knowledge of the animal in all its details and functions is absolutely necessary. This brings us back to the subject of this paper, namely, the judging of Poland-China swine and especially the use of the score-card as an adjunct to a proper estimate of the various points of the animal.

USE OF THE SCORE-CARD.

At our various agricultural colleges, the subject of instruction along animal-husbandry lines has made great progress during the past few years. It is a subject of great value to our agricultural interests and instruction in the principles of stock-judging is an important part of the work, as the future success of the stock grower and breeder is much influenced by his knowledge of what constitutes superior form and quality in animals. Expert judges, however, can not be made of every student given instruction along these lines, but he is started along the right road and as the after years give added experience, he can acquire a higher degree of ability in the knowledge of animal form and function.

In this instruction work the score-card fills an important place. The discussion of its use which follows will be mainly from this standpoint. As a means of placing animals in the show-ring it is used with poultry only. A National association of expert swine-judges exists and an effort is being made to so systematize the methods of scoring swine as to enable judges to use this method in the show-ring. As yet, it has met with no practical application. With a ring of thirty or forty animals before him, an expert judge can much more quickly and surely pick the best individuals and rank them by the ordinary method of comparative judging. The expert judge who goes into the ring with a clearly defined mental ideal is able to measure each individual by his mental conception and in so doing unconsciously applies the score-card without being hampered by its objectionable features. As an educator the score-card is of great value to the student, both the young man in college and the student in the great practical school of life, for we all must ever remain students if we would make any progress.

The score-card with detailed description, which you hold in your hands, is the one prepared by the National association of expert swine-judges for the Poland-China breed. It has been prepared and arranged with much labor by the association and has been several times revised. Each of the Poland-China record associations have a different scale of points and this multiplicity of record associations and numerous standards is one of the serious difficulties with which the breed has to contend. The standards adopted by each have gradually drawn together, however, until now they vary but little. Already one step toward unity has been accomplished by the consolidation of the Ohio and the Central-Poland-China Record associations and it is to be hoped that the breed may soon be released from this hampering influence. The score-card as given is an effort to describe in words, point by point, the ideal Poland-China hog. By a rigid application of the ideal there is probably not now a hog in existence which should receive a score of over 85 or 90 points. In its application, granted that the student is able to see correctly, the first thing to do is to learn thoroughly the different points and also their comparative value which are indicated by the number following each head at margin of card. For example we note that the back and loin is allowed fourteen points and the ideal is described as, broad, straight or slightly arched, carrying same width from shoulder to ham, surface smooth, free from lumps, creases, or projections, not too long, but broad on top, indicating well-sprung ribs; should not be higher at hip than at shoulder, and should fill out at junction with side so that a straight edge placed along at top of side will touch all the way from point of shoulder to point of ham, should be shorter than belly line. If a careful study of the individual shows that the back and loin vary from the ideal by 2 per cent, we would cut the fourteen points 2.8 or in round numbers three points, leaving its value as eleven points. Noting the neck we see it has a value of two points and the ideal is described as follows: Short, wide, even, smooth, well arched; round-

ing and full from poll to shoulder, with duo regard to characteristics of the sex. If we find our individual varies here from the ideal by 2 per cent the cut would be but 4 or in even numbers one-half point off, leaving the value one and one-half points. If we found the neck departing widely from the ideal, say to the extent of 50 per cent, the cut would be one point. Practice in the use of the score-card will tend to fix these relative values of the different parts firmly in mind. It leads to an analytical method of studying the individual, point by point. The student learns to overlook quite serious deviations from the standard upon some minor point provided the animal is very strong in the important points. The end of all work is the packing-house and the standard of utility is after all the final value of our animals. No doubt there are some present here to-night who have allowed some unimportant feature to become a hobby which has been ridden to the detriment of the animals bred as a whole. Almost all breeds of animals have suffered at some time or other from false standards in the form of fashionable families or fads of one sort or another which have not had a solid foundation to build upon, and the Poland-China breed of swine has not been exempt from these departures from the straight and narrow way which leads to greater utility and better adaptation to the special purpose of pork-production. As we study the score-card it is a great advantage if we can have some animals as nearly perfect as possible in order that the eye may be impressed with the ideal. The student studying this subject will do well to visit famous herds and shows in order that he may feast his eyes upon animals of high degrees of excellence. You positively can not produce a high type of hog unless you know what constitutes a good animal, and the time given to a careful study of the subject is well spent.

It is rather unfortunate that as yet no accurate standards of measurements have been agreed upon for our different types of animals. The taking of measurements is of great value, however, to the beginner and a study of the relative proportion of the parts and the various contour lines of the animal by means of the tape-line will aid greatly in training the eye to detect small differences and correctly estimate dimensions of the various parts.

In making a study of the individual animal, it is important that it be looked at from the correct view-points in order that a clear idea be obtained of the complete development of each part. There are four principal points of view, namely, the front, rear, standing at side and looking down upon the back, and a side position, half kneeling which gives a view of the underline. Viewed from these four different points we are able to note the full conformation of each part, and also the symmetry and relation of the parts as a whole.

In our college work we gradually lead the student away from the score-card as he grows in the ability to carry a mental picture of the ideal in mind and correctly estimate the departure from it in the individual animal. The score-card is used to establish fundamental principles and to direct the habits of observation in a systematic manner, rather than as a means of placing animals in the show-ring.

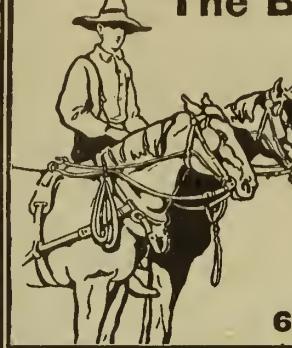
It is to be hoped that the cards which have been distributed will be preserved and carefully studied along the lines suggested. A faithful effort to know more of your chosen breed will surely bring its reward.

THE SCORE-CARD USED BY STUDENTS IN JUDGING POLAND-CHINA HOGS.

1. HEAD—Broad, even, and smooth between and above the eyes; face slightly dished, tapering even and gradually to near the end of the nose. Broad lower jaw..... 4
2. EYES—Full, clean, prominent, and expressive 2
3. EARS—Standing up slightly at the base to within two-thirds of the tip where a gentle break or drop should occur; medium size, thin, and fine. Slightly inclined outward 2
4. NECK—Short, wide, even, smooth, and well arched 2
5. JOWL—Full, broad, deep, smooth, and firm; carrying fullness back to near point of shoulders.... 2
6. SHOULDER—Broad, and oval at the top, showing evenness with back and neck 6
7. CHEST—Large, wide, deep, and full; even underline to the shoulder and sides with no creases. Brisket, smooth, even, broad, and extending well forward 12

SLOAN'S LINIMENT

For Your Family and Your Horse
The Best Antiseptic Known.



TRY IT FOR

Rheumatism, Strains,
Sprains, Swellings
and Enlargements.

Price, 25c., 50c. and \$1.00.

Dr. EARL S. SLOAN,
615 Albany St., Boston, Mass.

BLACKLEGIDS



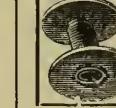
THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill.
No string to rot. Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations.
For Sale by All Druggists. Literature Free—Write for it.

PARKER, DAVIS & COMPANY.
DETROIT, MICHIGAN, U. S. A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

STOLL'S STAY-THERE EAR MARK.



The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send for sample. H. C. Stoll, Detroit, Mich.

CAR-SUL

The Disinfectant Dip That Is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Originators of Dipping Tubs. 1501-03 Geesee St., Kansas City, Mo.

DO YOU WANT GOOD READING



The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$3.00
The Cosmopolitan.....	1.00
Woman's Home Companion.....	1.00
Kansas Farmer.....	1.00

Total \$8.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

KANSAS FARMER CO.,
TOPEKA, KANSAS.

FIFTH TERM

JONES' NATIONAL SCHOOL

OF

Auctioneering and Oratory

Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now enrolling in 13 states. For Catalogue write Carey M. Jones, President

HORSE'S SORE SHOULDERS CURED FREE
SECURITY GALL CURE.

Name your Dealer and this Paper and we will mail you a

FREE SAMPLE

Cures sore shoulders, necks or backs while harnessed or idle.

SECURITY REMEDY CO.

Minneapolis, Minn.

are bred by Mr. Allen. In preparing his sale catalogue which is now out of print and ready for distribution, there is given the breeds of both dams and sires, which is more than is often given in sale catalogues, for very few breeders have cattle as well-bred in Scotch lines as Mr. Allen has in his herd. In this offering are a number of show cattle and several herd-headers, of which special mention will be made in the next issue. In the meantime, study the sample pedigrees given in the advertisement each issue, send for catalogue, and plan to attend the sale of the purest Crickshank cattle ever offered in the West.

The Marshall County Hereford Sale.

The Marshall County Hereford Association held its fourth annual sale at Blue Rapids, Kansas, last Saturday. Their offering was one of the good ones of the season consisting of animals by such sires as May's Keep Qn, Edwardo, Pontiff, Rancher, Baccalaureate, Governor, Philetus, Senator, Mytern, Monarch, and Elvira's Java, who sprung from the best Hereford blood in the country.

While the prices were not as high as the same class of animals have brought at other sales this winter, the members of the association were pleased with the results of the sale, and every man who purchased an animal went away feeling that he had secured an unusual bargain, and that every animal that went through the ring was a credit to the integrity and ability of the members of the association as breeders of white faces.

Those who are familiar with the history of this association point to it with pride for they feel that it is one of the great Kansas institutions that has sprung up and continued to do business under the most trying difficulties. Its first sale was held some years ago first on the eve of the great depression in the cattle business. At that time nearly all of the consignment went to local parties who, when the depression came, sold them at whatever price they could get. The result was that the association's first consignment was not permitted to go out and make a name for it, but notwithstanding this, at each succeeding sale buyers began to come from a distance and at the one first held, purchasers were present from Kansas, Nebraska, Texas, and Missouri, and nearly a carload of the animals sold were at once shipped South to be used as herd-headers in Old Mexico.

We predict a great future for the Marshall County Hereford Association. It is made up of men and women of integrity and ability. They are the kind of people who do things, and they are bound to succeed.

The following persons were the contributors to the sale. Miss Lou Gobbin, A. Brook, Geo. E. Miller, E. R. Morgan, Brown Bros., Renwick McKee, W. A. Gilson, L. P. Larson, Cottrell Bros., P. A. Abrant, W. T. Strange and Son, Miss Florence Preston, and F. W. Preston.

Among the buyers were Axtell Edmund, Cleburne, E. Ileneburg, Wheaton, A. T. Vilander, Irving, Thos. Nugent, Holton; Hurt & Swanstone, Booneville, Mo.; Samuelson Bros., Bala, Kans.; Wm. Moss, Alma; A. V. H. McClure, Republic; Swen Olson, Manhattan; O. C. Lund, Randolph, Thos. Seulier, Blue Rapids, John Villeer, Cleburne, W. A. Gilson, Blue Rapids, E. Blanchard, Friend, Neb.; Theo. Welchelbaum, Ogden; Wm. Phillips, Stockdale; J. G. Arbuthnot, Haworth; Carl Hawkinson, Randolph; E. Miller, Blue Rapids; W. B. Hunt, Blue Rapids, A. Fagler, Wakefield, Wesley Rush, Tulsa, Tex.; John Erickson, Waterville; B. Spratt, Blue Rapids.

The Johnson County Sale.

Slowly, but with the assurance of success which a fair sale a square deal give to such an undertaking, the Johnson County Fine Stock Association is building up a business of association sales at Olathe, Kans. The second of the series was held Friday and although some things went low everything in the barn was sold and neighbors as well as visitors were given to understand that if bargains were to be had they could get them by being on the ground. For the most part the Shorthorns sold fairly, considering condition and quality, but in the Hereford section a number of very creditable things were offered which did not nearly bring their value. Prices ranged from \$100 down to \$25, several selling at the higher figure. Perhaps the best bargain of the sale was the handsome young cow, Scottish Star, with young calf at foot by Lord Banff 2d. She was consigned by H. E. Hayes of Olathe, Kans., and sold to A. L. Sherman of Lenexa, Kans., for \$95, probably \$75 under her value on the basis of the sale.

Contributors to the sale were J. L. Hoover, Gardner, Kans.; A. B. Kelsey, Gardner, Kans.; A. J. James, Lenexa, Kans.; J. W. Fergus, Lenexa, Kans.; G. P. Kelleher, Springhill, Kans.; A. M. Cooper, Olathe, Kans.; J. F. Hastings, Edgerton, Kans.; J. L. Williams, Olathe, Kans.; G. B. Little, Olathe, Kans.; J. B. Dickson, Edgerton, Kans. H. E. Hayes, secretary of the association, managed the sale.

Among the buyers were; J. H. Powelson, Gardner, Kans.; Schell Case, Olathe, Kans.; A. S. Catlin, Olathe; F. X. Kelly, Gardner; M. C. Reed, Olathe; Scott & March, Belton, Mo.; Geo. W. Aalsworth, Olathe; W. W. Stine, Gardner; H. M. Hill, Lafontaine, Kans.; Nat Lee, Gardner; G. Goode, Olathe; Chas. McFarland, Olathe; Jim Boon, Olathe; A. J. Calvert, Stillwater, Kans.; F. McCarty, Edgerton; K. W. Stern, Gardner.

Shorthorn Sale at Hiawatha.

The first annual sale of the Brown County, Kansas, Breeders' Association will be held at Hiawatha, Kans., on April 19. This is one of the best opportunities. Shorthorn men will have a chance to buy the best from eleven of the leading herds of Shorthorn cattle in Kansas, Nebraska, and Missouri at one sale. The very best animals from each herd are going to be consigned to this sale. Mr. Everett Hayes is the manager and is also a breeder of fine Shorthorns and will consign six head to the sale which we will mention

later. There are in all 52 head to be sold, of which 21 are bulls and the rest females. They are all either straight Scotch or Scotch-topped and represent some of the very best blood in this country. The following prominent breeders will consign cattle to this sale: G. Y. Johnson, of Willis, Kans., consigns 4 bulls and 6 females; Everett Hayes, of Hiawatha, Kans., 2 bulls and 4 females; Jas. P. Lahr, Sabetha, Kans., 3 bulls and 3 females; Bert K. Wise, of Reserve, Kans., 1 bull; Geo. Manville, of Faucett, Mo., 10 females; W. W. Brown, of Weston, Mo., 1 male and 2 females; A. F. Robinson, of Morrill, Kans., 2 males; Ed. Shuler, of Falls City, Neb., 1 male and 3 females; John McLair, of Horton, Kans., 1 male, a Scotch herd bull. This is Baron Mysie 176261, a 5-year-old bull bred by R. T. Scott of Pawnee City, Neb. Baron Mysie is sired by Velvetine Prince, out of Mysie 51st by Baron Wry, second dam Mysie 50th by Imp. Prince President. This is a straight Scotch bull and is without a doubt one of the leading bulls in this section of the country. Remember, this sale consists of the very choicest animals from these excellent herds and this being the first sale held by this association they are consigning some very attractive cattle and only those that will be of value to the buyer. This sale will be held under cover at Hiawatha, Kans., on April 19. Write at once to Everett Hayes, manager, Hiawatha, for a catalogue. Geo. P. Bellows, C. H. Marion and N. T. Moore will do the selling and bids can either be sent to them or to the manager. When writing mention this paper, and don't fail to attend this sale.

The Black and White Sale.

At Independence, Mo., on April 6, was held a sale of Poland-China swine by E. E. Axline, of Oak Grove, Mo., and of O. I. C. swine by Dr. O. L. Kerr, of Independence, Mo. Both of these herds

I. Tyson, Mount City, Mo....	58.00
6. G. G. Koenig, Lemars, Ia....	101.00
7. Frank Walker, Holmesville, Neb....	27.50
8. Matthews Bros., Grant City, Mo....	60.00
9. W. E. Hayes, Osawatomie, Kans....	25.00
12. W. H. Cole, Pattonsburg, Mo....	51.00
13. E. J. Munsell, Bonneville, Mo....	50.00
16. Dodge & McDill, Beloit, Kans....	32.00
18. Wm. Young, Meriden, Kans....	32.50
20. E. Barrett, Osawatomie, Kan....	35.00
25. W. J. Lawrie, Cawker City, Kans....	35.00
26. C. B. Adams, Grandview, Mo....	50.00
28. Dave Barrett, Osawatomie, Kans....	70.00
30. G. G. Koenig.....	310.00

The H. R. Little Shorthorn Sale.

The Rustler, the herd bull to sell in H. R. Little's sale, is half brother to Ruberta, the great show and breeding cow at Tebo Lawn, having the same dam. The sire of the Rustler is also half brother to Ruberta, having the same sire, the great St. Valentine. The Rustler has a good show record, himself having won as a calf, 1st at the great show of the northwest at Hamline, Minn.

First at Kentucky State fair, 2d at Indiana State fair, 2d at Illinois State fair, 2d at Wisconsin State fair, 2d at the great Royal, Kansas City, 4th at the great International at Chicago. He was also shown with his great sister, Ruberta, in the produce class always standing close to the head of the list.

While his breeding is first-class and his show record is good, it is as a breeder that he has achieved his chief glory. Some of the best young stock on Tebo Lawn farm being by him, including a steer, that Mr. Andrew Pringle says is as good as he ever saw of the age.

The splendid work he has done in the Little herd will be demonstrated,



KENTUCKY JACKS AND STALLIONS.

Twenty-five choice registered black jacks, 15 to 16 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also saddle stallions and a few jennets. J. F. Cook & Co., Marion, Kans.; Lexington, Ky.

are famous. No Poland-China breeder in the West would consider his herd perfect without some of the Axline kind in it, while Dr. Kerr with his O. I. C. pocketed most of the good prizes at the World's Fair that were given to that breed. Mr. Axline sold 30 head of Poland-Chinas, but his trade has been so good that he was obliged to sell some youngsters that he would much rather have kept longer. Excepting 5 head, his offering was all of summer and fall farrow. His average for the 30 head was \$54.40. The top of the sale was brought by the yearling sow, Lady Success, who went to Leon Calhoun, Potter, Kans., for \$400. Calhoun knows a good hog and if it suits him he buys it.

Dr. Kerr's offering was first-class in every respect and good judges pronounce it the best O. I. C. offering ever made in the West. His average on the 30 head was \$64.95. The top of the sale was bought by Kerr Salla, who went to G. G. Koenig, Lamars, Iowa, for \$310. A litter sister of Kerr Queen went to C. H. Brown, Tishomingo, I. T., for \$107.50. The sales were conducted by Col. Jas. W. Sparks, Marshall, Mo., who never did better work. It is pleasant to state that Dr. Kerr has a fine lot of youngsters coming on for future delivery. Some of the representative sales are given herewith.

AXLINE'S POLAND-CHINAS.

No.	Price.
1. R. F. Milton, Lees Summit, Mo....	\$100.00
2. J. H. Herman, Independence, Mo....	87.00
3. Leon Henninger, Potter, Kan....	100.00
4. Leon Calhoun, Potter, Kans....	400.00
5. I. Tyson, Mount City, Mo....	70.00
6. Mo. Ag. College, Columbia, Mo....	70.00
10. O. J. Rhodes, Lees Summit, Mo....	45.00
13. Goodlow Bros., Blue Springs, Mo....	21.00
14. T. P. Sheehy, Hume, Mo....	32.00
21. Albert Hutton, Keystone, Mo....	21.00
25. W. E. Baugh, Mt. Vernon, Mo....	20.00
27. W. C. Swope, Independence, Mo....	81.00
28. D. L. Waring, Chester, Neb....	42.00
KERR'S O. I. C.'S	
Sub. for Lot 1.—C. H. Brown, Tishomingo, I. T....	\$ 55.00
2. T. B. Hall, Windsor, Mo....	51.00

McLaughlin Bros. Percherons.

McLaughlin Bros., Columbus, Kansas City and St. Paul, write:

Our importation this time made a record-breaking trip. The "Minnehaha" landed in New York at twelve Saturday noon. Our horses were passed through the Custom House and loaded into express cars, so that they left New York Saturday night and arrived in Columbus Sunday noon, two days quicker than we anticipated them.

On account of the very excellent weather during the trip across, the horses landed here in the very best condition. Never before did we receive such a good lot of horses, and in



GOMBALT'S CAUSTIC BALM

A safe, speedy and positive cure for

Curb, Solint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balm sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

KRESO DIP

KILLS LICE

ON ALL LIVE STOCK
EASY & SAFE TO USE



KRESO DIP

KILLS THIS

AND ALL OTHERS

RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write For
For Sale By All Druggists.

PARKE, DAVIS & CO.

HOMES OFFICES AND LABORATORIES:
Detroit, Mich.

BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U.S.A.; Walkerville, Ont.; Montreal, Que.

FOR SALE

Four imported full blood Percheron mares, in foal and weighing 1,700 and 1,800 pounds each. These mares are handsome blacks and were recently bought from the Hartman Stock Farm, at Columbus, Ohio. Pedigrees furnished with each. Animals can be seen at my farm, one mile north of Waimego, Kans.

ALEX KANE

Square Deal Stock Farm

Wm. A. Calder, Prop., Bancroft, Kans.

We have for sale at \$20 each, two Poland-China bears, sired by Calder's Chief by Garver's Choice, by Kansas Chief; dam Lady U. S. by U. S. Jones.

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Compton 89195.

W. J. Grist, - Osawkie, Kans.

FOR SALE

At a bargain, one Davis No. 3 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
415 Kansas Avenue, Topeka, Kansas

such healthy condition, as those that arrived here yesterday. Every horse is well and many of them are ready to offer for sale at once. These horses came over in charge of our foreman, James B. McLaughlin remains in France where he will continue to buy all of the best horses raised in that country.

The H. R. Little Shorthorn Sale.

In Henry Little's sale April 26, will be bull and heifer calves that, if properly grown, will be winners in next fall's shows. If you are looking for something for the junior yearling class especially, remember this.

These calves are, of course, by The Rustler, who is one of the greatest herd bulls that will pass under an auctioneer's hammer this year, and then there are 24 good cows and heifers in calf to this great sire. All are of good breeding and the kind that Mr. Little expected to retain as a breeding herd until the sale of his farm and a dispersion of the herd was decided.

If you have not yet received a catalogue, send at once to Mr. Little for it mentioning THE KANSAS FARMER and be in attendance at the sale pavilion, Hope, Kansas, April 26, 1906.

The Big Missouri Shorthorn Sale.

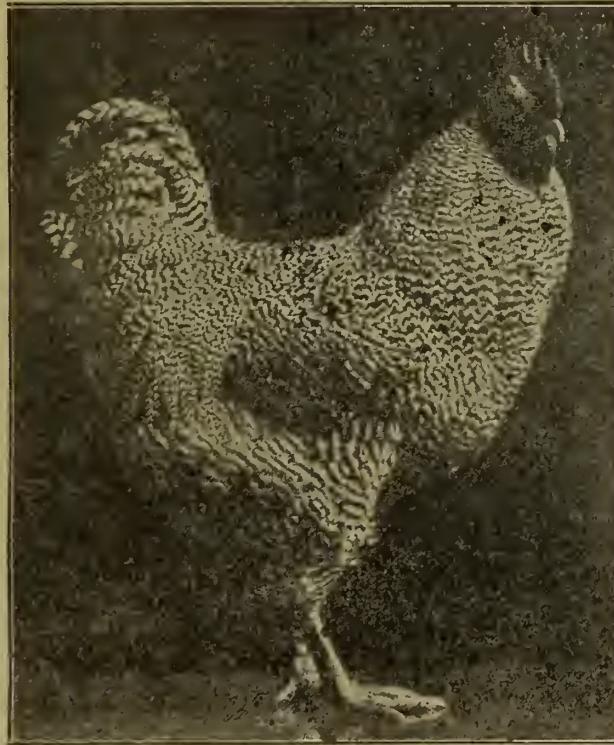
On Friday, April 20, at the new sale pavilion on the State Fair grounds at Sedalia, Mo., will be held a remarkable Shorthorn sale. It is not often that cattle from such noted herds are brought together in one sale. All the consignors are known far and wide for the quality of the Shorthorns they breed and most of them have a national reputation. These gentlemen are exhibitors in the prominent show-rings of

herds, and he intends to keep a class of cattle that is up to the standard. Mr. Wallace is one of the leading farmers and stockmen of Waterville and Washington County, Kansas.

Mr. Thomas's herd is headed by the great boars, Kansas Wonder and Nebraska Wonder, which are two of the greatest sires in the West. S. B. Steele, of Waterville, Kansas, has six Duroc under-boars for sale. They are fine ones and just right for summer service. If you need one write him.

Owing to the fact that the date claimed for the Shawnee Breeders' Association sale of Shorthorns conflicts with the date already claimed by H. R. Little, Hope, Kans., for his sale and the added fact that some of the consignors sold so short at private sale that it became impossible to secure enough animals to make a representative sale, the directors have decided not to sell April 26, the date claimed.

The Johnson County Breeders Association held their first cattle sale at Olathe April 6, and while prices ruled rather low, all the offering was sold and the members of the association have the assurance of the breeders in attendance that they are producing good ones, and that they should have been better appreciated. The Johnson County Breeders, who have banded themselves together for the advancement of the stock interest of the County, are on the right track and it is certain that in the future they will reap a harvest from the good seed scattered in this, their first sale effort. The purchasers all got animals at a price that could not help but prove profit-



The first-prize Plymouth Rock cockerel, St. Joseph, Mo., 1906; score 93½ points by Rhodes. One of the highest-scoring birds in the West. Owned by A. H. Miller, Bern, Kans.

the country, especially that of the American Royal where they get "inside the money." Sedalia is only about 3 hours from Kansas City on the Missouri Pacific. It is also on the main line of the M. K. & T. railroad. Get a catalogue and be there. It will be worth the time and trouble.

Col. T. E. Gordon.

The success of all public sales depends not only on the quality of the stock and a liberal amount of advertising but the ability of the auctioneer, as well. We thing desire to call attention to the card of Col. T. E. Gordon, of Waterville, Kansas, in this paper. Col. Gordon was recently elected president of the State Auctioneers Association. He is an able auctioneer, familiar with pedigrees and values of animals, and always enjoys the confidence of his audience. He is fast making a record as an auctioneer and can refer to the well-known breeders of Waterville as to his success and ability. You can make no mistake by employing him.

Plymouth-Chinas at the American Royal.

E. E. Axline, of Oak Grove, Mo., announces that the Berkshire, Duroc-Jersey and O. J. C. breeders have arranged a show of breeding stock in their several breeds at the American Royal next fall and desires that all Poland-China breeders write their wishes to him. As the other breeds will show in the breeding rings it seems desirable that the Poland-Chinas be represented also.

Gossip About Stock.

Albert Schroll, of Greenleaf, Kansas, is one of the coming Poland-China breeders of the State. Mr. Schroll's brood sows are of the large type with good backs and legs. He will have a fine crop of pigs for sale this fall.

Chester Thomas, of Waterville, Kansas, one of the well-known Duroc breeders is having excellent luck with his spring farrow. He now has over a hundred pigs and will be on the market next fall with some good ones. Mr. Thomas's brood sows are wonders in size and excellence of general make-up.

Thomas A. Wallace, of Waterville, Kansas, is one of the new members of the Hereford fraternity, having purchased thirty-three head at the closing out sale of Soltz Bros., of Barnes, Kansas. Mr. Wallace has purchased a bull from one of the leading Nebraska

able investments and these customers will be further purchasers when the advantage of the well-bred stock is demonstrated to them.

June K. King, of Marshall, Mo., is one of the prominent breeders represented in the April 20 Shorthorn sale to be held at Sedalia, Mo. Of his offering, Mr. King writes: "The four head that I consign are good useful cattle. The two cows are nearing their calving. One is in extra good flesh and a grand good one in any company. She is a Moss Rose. The Barrington is not so good nor in high condition but is a regular breeder of large, growthy calves. One of them in the sale—the Wild Eyes calf—is as well bred as any Wild Eyes living and is quite a fine calf. It comes of a very profitable and long-lived family."

Thomas and Swank, of Waterville, Kansas, formerly well-known as breeders of Duroc are closing out their red hogs and will then breed Poland-China exclusively. They have purchased their Poland China sows from the best breeders in the State and in their herd may be found sows from the stock farms of Dawley, Hammond, Prewitt, Wm. Martin, and others. These gentlemen are well known to the buyers of pure-bred stock and no mistake will be made when you buy them. They will have some fine offerings this fall with good backs and legs and fancy heads and ears and they have no superiors.

Manwaring Bros., owners of Ridge View herd of Berkshires at Lawrence, Kansas, writes that their hogs are doing well and their sales are good. S. McCullough, of Ottawa, Kansas, just purchased from Ridge View the fine young boar, British Duke 86585. This young boar has made a fine record as a breeder and is siring some mighty good pigs. He is a grandson of Berryton Duke and will probably equal him as a breeder. The Manwarings have sold out almost everything but expect to be able to put a fine bunch of youngsters on the breeding market that were sired by this boar. Only one yearling boar for sale now, but there will be a lot of hummers ready soon.

Chas. Morrison, owner of the Phillips County herds of Red Polled cattle and Poland-China swine at Phillipsburg, thinks he lives in one of the best sections of the country. In a recent letter he says they have been having plenty



How to Raise Young Chicks

The difficulties encountered in raising young chicks are numerous. Disease and lice are said to destroy nearly 50% of the annual poultry crop. Errors in diet and unsanitary conditions also help to decrease the poultry profit. But you do not need to suffer these losses if you will give poultry half the care you give other stock. Besides

DR. HESS POULTRY PAN-A-CE-A

is guaranteed to prevent and cure gapes, cholera, roup, indigestion, etc., allaying fermentation and destroying the germs of disease. By its special tonic properties it increases the powers of digestion and assimilation and compels the system to appropriate the maximum amount of food to egg production, also making the young grow fast, healthy and strong. Besides increasing growth and egg production Dr. Hess Poultry Pan-a-ce-a has special curative properties peculiar to itself. Take no so-called poultry food as a substitute. Remember that Dr. Hess Poultry Pan-a-ce-a is the prescription of Dr. Hess (M. D., D. V. S.) and bears the endorsement of leading poultry associations in the United States and Canada, and is sold on a written guarantee. It costs but a penny a day for about 30 fowls. Feed Poultry Pan-a-ce-a as directed, sprinkle Instant Louse Killer on the roosts, nests and into the dust bath, and we guarantee you will have no loss from disease.

1½ lbs. 25c, mail or express 40c. } Except in Canada
5 lbs. 60c. 12 lbs. \$1.25 } and extreme
25 lb. pail \$2.50. } West and South.
Send 2 cents for Dr. Hess 48-page Poultry Book free.

DR. HESS & CLARK, Ashland, Ohio.

INSTANT LOUSE KILLER KILLS LICE.

California

For a change why not make that visit to California early in the season? You'll enjoy it. Visit Grand Canyon enroute. Stop over and see the Petrified Forest. Ride through the country of fruits and flowers. Attractive and inexpensive variable route tours within the means of almost every one. About one-half the usual rate. Long limit and liberal stop-over privileges. I'll help you plan a trip. Tickets on sale April 25 to May 6, inclusive.

The Santa Fe is the line of fast trains, modern and comfortable chair cars and luxurious Pullmans, Harvey meals, rock-ballasted track, block signals.



N. B.—Members of the Mystic Shrine and delegates to National Congress of Mothers, both to be held in Los Angeles between May 7 and 11, should take advantage of this offer. Descriptive folder free.

T. L. KING, Agent, Topeka, Kansas

FOR SALE THE UNCLE SAM OIL-GAS BURNER
Asphalt Residuum for good roads and streets; crude oil for fuel, lubricating, or painting; gas, fuel-oil and water white kerosene of high-grade. All anti-trust independent products by barrel or carload.

W. F. RIGHTMIRE, - 216 The Drive, - Topeka, Kansas

of rain and the ground is full of water. Feed is plentiful and the alfalfa and wheat are showing up in great shape. Mr. Morrison has sold, during the past week, one fine Red Polled bull to J. C. Christensen, Randolph, Kans., also one to J. M. Walters, Lebanon, Neb., who also took home a fine boar to head his herd. Bred sows and gilts were also sold to F. A. Stark, Oxford, Neb., who took four hogs. L. J. Bowler, Lenora, Kans., took one; L. W. Beem, Smith Center, Kans., one; T. P. Gardner, Republic City, Neb., one, and George Woodman, Republican City, Neb. The demand for Red Polls was never better and Mr. Morrison has difficulty in raising enough to go around. He has a fine bunch of Poland-Chinas ready now. See his advertisement.

W. D. Calder, proprietor of the Square Deal herd of Poland-Chinas, Bancroft, Kansas, is one of our new advertisers. Mr. Calder is a young man

of exceptional ability in the raising of stock, and while he is not as long in the business as some others, he has succeeded in building up a good business in Northern Kansas.

He has some good herd animals and among his herd sows we found Expansion by Expansioness 26293, Black Beauty 73708 by Shawnee Chief, Calder's Pride 73707 by Black Chief, and many others of equally good breeding. His herd boar is an animal of excellent qualities. He is heavy boned, has a good head and neck, and a splendid back with well-sprung ribs, and is an animal of great breeding. He was sired by a son of Highland Chief 26354 and his dam is a granddaughter of Rival Perfection. With this good herd boar, Square Deal 36749, and the sows that he has Mr. Calder will have some fine pigs this fall. He now has two full sets old enough for service which he will sell right. See his ad in this issue.

The Santa Fe Good Roads Special.

(Continued from page 401.)
were the logs though it is better to mortise in the cross-pieces. They should be of pine or other light wood.

Of course many variations may be made from the description here given, but the purpose has been to show how to make a drag with the least expense and of the most effective pattern. The making of the drag is the hardest part of the whole problem of securing good roads without money. It will require the ordinary farmer perhaps two hours to complete the drag and have it ready for use with the ordinary tools at hand. A person who is handy with tools could make it in much less time and it will wear indefinitely when constructed according to the description given above.

With this drag better work can be done on the dirt roads than is possible with a \$250 grader. The grader itself requires the strength of at least one team to pull it on good roads when it is running empty. The grader will deposit a large mass of soft earth in the middle of the road just where it is not wanted and just where it will collect a large amount of moisture with each succeeding rain. The purpose of the split-log drag is to maintain the hardness of the surface under all conditions of weather.

In using the drag, start the team so that the wheel-track will be between the horses, and drive down the right-hand side of the road leading towards town. When you have reached the end of the section of road you desire to cover turn, and with one horse on each side of the wheel-track, come back over the left-hand side of the road. The dragging must not be done when the ground is too wet and will do comparatively little good if the ground is too dry. The proper time to drag is after each rain or spell of wet weather when the earth gets dry enough so that it will not stick to the drag. If it is desired to widen the road it is best to plow a very light furrow on the mark left by the right-hand end of the drag as it has passed to and fro and then, with the drag spread the loose earth over the surface of the road so that the passing teams may pack it hard. This can be continued indefinitely until the road has reached the desired width.

Many farmers think it is necessary to precede the use of the drag with the road-grader. This is not necessary at all and should not be done under ordinary circumstances as the drag will make the most perfect road without the assistance of any other tool or implement. Many farmers seem to think it necessary to construct their drags so as to move large quantities of earth toward the middle of the road. This is all wrong and just what the drag is not built for. Many farmers also think they should shoe the front faces of both the logs in the drag with iron or should at least shoe the entire surface of the front log. Again this is all wrong. The placing of shoes on both the logs or across the entire length of the front log defeats one of the purposes for which the drag is built, namely, the spreading of a thin layer of earth toward the middle of the road with each dragging and smoothing the surface.

A short experience will teach the operator how to handle a drag to the best advantage. He will learn that he should have a slow-walking, steady team, as a fast team will carry the drag along so rapidly that the collected earth in front of the drag does not have time to fall into and fill the ruts and holes. He will find that by changing his position on the platform he can make of the drag a cutting instrument or a smoothing instrument. He should use the drag at a time when the soil is wet enough to bake in the sun after it has been dragged. The method used by Mr. King is one which makes a good road of successive thin layers of earth, each of which is packed solid by the traffic and retains the solidity of the surface all the year around.

It is less labor to maintain a half mile of dirt road in good condition the year around than it is to water a team of horses for the same length of time. A trial will prove this.

NOTES.

There are many sod roads in Kansas and their proper handling presents a problem that has not heretofore been easily solved. Mr. King's recommendation is that, for the purpose of handling sod roads or those which have a strip of sod in the middle, a time should be selected when the ground is thoroughly soaked with water. A disk-harrow should be set at a sharp angle and run over this strip of wet sod to cut it into ribbons. Then with the use

of the King drag these ribbons may be broken up and distributed over the surface of the road in such a manner as to lay the foundation for a good road in the future.

One advantage possessed by the King drag and its use at the proper time, is that it will kill the weeds along the road. Nothing is so destructive to a good road as the heaving action of growing weeds, and if the drag is used at the proper time, when the roads are wet but not sticky, not only will the small weeds be destroyed but a new surface on the road will be created that will not permit the seeds to germinate.

Statistics, published by the United States Department of Agriculture at Washington, show that the average dirt road in ordinary condition produces so much draft on a team that it costs the farmer 25 cents per ton per mile to haul his produce to market. These figures are based upon average conditions and with an average haul of three miles. In France where the roads are good, the cost is less than 8 cents per ton per mile.

Most people, when they see a macadam road, think that the macadam constitutes the road. This is all wrong. The road should be built before the macadam is placed upon it. The stone is simply used to prevent wear just as the tire on a wagon-wheel is used to protect the wheel. It is the wheel and not the tire that supports the load. It is the road and not the macadam that supports the traffic.

The split-log drag should be used after each rain or spell of wet weather and when so used it serves to add a new and thin layer of earth to the road that may be packed solid by the traffic before the addition of another such layer. Dirt roads should be made in the same manner as a house is painted, one coat at a time.

Ordinarily it is never necessary to use the road-grader before the split-log drag, or at any other time. Of course there are exceptional cases where the grader is useful. But as Mr. King says: "The split-log drag needs no John the Baptist."

The idea that road-improvement means brick-paving or macadam and consequent high taxation has been thoroughly disproved by the experiences of the party on the Santa Fe Good Roads Train and by thousands of others. But even if it were possible to build all of the macadam roads that now seem desirable, there would still remain a very large percentage of dirt roads. A farmer who came from Ohio recently said that he could not remember ever having seen a dirt road until he came West, and yet statistics show that in his country there are more than 90 per cent of dirt roads. The problem of how to handle the large mileage of dirt roads, then, is a very important one, and is thoroughly and easily solved by using the split-log drag.

In the pamphlet distributed by the Santa Fe Railroad on the Good Roads Train occurs a statement that is incorrect and likely to cause trouble. The statement is this: "First make the drag and have a four-horse team ready for use. Wait until your roads are very soft, the wetter and softer the better." Mr. King states that there is but one time when a King drag can be used under such conditions, and this is for the purpose of filling up water-holes that exist in the road and occurs but once in the history of any dragged road.

On the principle that it is easier to make a water-tight roof than a water-tight tank, Mr. King urges the use of the drag one time when first beginning its use and when the road is very sloppy and wet. By moving a mass of thin mud into these puddled water-holes they are filled with a material which assumes a brick-like hardness when it dries and serves to turn the water hole wrong side up so that the outside of the bottom may be used for the road instead of the inside.

In nearly all country roads it is necessary for the driver to go slowly when approaching a bridge or culvert because of the "chuck-holes" on either side. After the King drag has been used a short time these chuck-holes cease to exist, and the speed of the team need not be slackened in passing a bridge or culvert.

Most of the stops made by the Good Roads Train were at county-seat towns. Whenever this occurred Prof. W. C. Hood, of the State University, who was one of the lecturers on the train, collected figures from the county clerks showing the amount of expense now incurred for the maintenance of county roads in each county, exclusive of culverts and bridges. This amount was found to range from \$40 to \$50 per mile per year. This heavy expense is incurred by the officials under the

present system of road-making in building roads which they do not want and can not use, when by use of the King drag they could have good dirt roads at an average expense of \$5.00 per mile per year or less.

The split-log drag is not a good ditching machine. While it will give a good contour to the road itself it is generally desirable to have a ditch at either side to carry off the surplus water. This can be made easily and cheaply by building a ditcher in the shape of a letter A or an old-fashioned barrow, and placing a steel shoe on the front of the left-hand arm. The right-hand arm serves to guide the machine in the ditch and the left hand one does the cutting.

More mistakes are made by those who build King drags in placing the logs too close together than in any other way. The logs in the King drag should be not less than 30 inches apart and it would not be harmful to have them farther apart. They must never be closer.

Build a King drag now and talk about it afterwards. Get rid of the idea that you have built it for the purpose of moving large quantities of earth to the middle of the road. That is not the object, although it will be found that the middle of the road gets gradually higher with the constant use of the drag, and ultimately it will become necessary to reduce the crown by dragging dirt away from the middle instead of toward it—about once in three draggings.

Don't drag the road when it is too dry. This simply makes more dust and wears out your drag and your temper. It is better to drag often in the winter and spring and less frequently in the hot, dry months of the summer and fall. Mr. King states that he kept the road in front of his place like a race-track during most of the year and only dragged it twelve times. Two of these draggings occurred in February and none in August.

Do not let the children ride on the drag. It is not a plaything nor is it a sled. It may be dangerous for the children to ride upon it and it would certainly interfere with its proper work.

If the dirt roads of the country are properly dragged, a demand will come in time for macadam or gravel roads between important towns.

Mr. D. Ward King, of Maitland, Mo., who has made the split-log drag famous, lays no claim to being its inventor nor does he have it patented. He states that the inventor of the split-log drag died some 300 years ago and the only merit Mr. King claims in connection with it is its introduction to the general public. To this he is certainly entitled and should receive the thanks of all as a public benefactor. The split-log drag is not for sale but is free to everybody. All that is desired is to see everybody use it.

If your work is of such a nature that you can not drag your road on proper occasions at all seasons of the year, it is better to chip in a few cents with your neighbors and employ some one who will make it his business to drag the road at the proper time. Such a person can be employed in most neighborhoods at from 25c to 35c an hour for time actually spent. This is the Kansas Club Idea sanctioned by the Kansas Good Roads Association at its last annual meeting.

During the trip in the gas belt the party on the Good Roads train were permitted to see a number of interesting and unusual sights to be found nowhere else in Kansas outside of this wonderful region. At Coffeyville the party was permitted to visit a very large pottery and witness the operations of making jugs, milk crocks, etc., which are burned by natural gas. At Erie the party was conducted through an oil refinery and shown the wonderful processes through which the crude black petroleum passes in the process of the manufacture of naphtha, gasoline, kerosene, watch oil, machine oil, fuel oil, paving residue, tar, and coke. At Independence all of the operations necessary in the manufacture of window glass were seen and these were marvelous to most of us. At Cherryvale the train passed close by a plant of the great Uncle Sam Oil refinery though time did not permit us to visit it. At Iola the party was accorded the unusual privilege of an inspection of all of the departments of one of the greatest smelters in the United States. There are some 400 men employed here in the process of changing the coarse-grained, yellowish-looking rocks into the silvery zinc ingots.

Because of the lateness of the season, which kept the farmers at home, but more perhaps because of the heavy down pour of rain on Saturday, the crowd in attendance at the Topeka



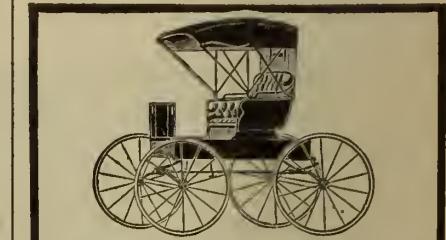
ROOF PROTECTION
Any building that is worthy of a roof is worthy of a good one; one that will protect the contents from rain, wind or snow. Any roofing material that requires patching every little while is liable to cause you more damage than a new roof of

Mica-Noid
READY ROOFING

And besides, consider the annoyance. We don't claim that Mica-Noid will last forever, but years of test in all kinds of climates have proven it will outlast tin, shingles, or iron many times. Then there is another feature of interest about Mica-Noid. You put it on yourself thereby saving one-half the expense. Wouldn't Mica-Noid make a splendid investment for any of your roofs?

To enable you to examine this roofing, we will send you a sample of each thickness, FREE. All we ask is your name.

ASBESTOS MFG. & ROOFING CO.,
306 Carr Street, St. Louis.



No. 628 3/4. Top Buggy with Large Phaeton Seat and 1 1/2 inch cushion tires. Price complete, \$71.00. As good as sells for \$80. more.

33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price. We are the largest manufacturers in the world selling to the consumer exclusively. We make 200 styles of Vehicles, 65 styles of Harness. Send for large free catalog.

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, IND.



No. 4 1/2. Single Curved Breast Collar Harness. Price complete, \$10.75. As good as sells for \$15.00 more.

60 DAYS FREE

WE WILL SEND any windmill we make to

any address to be given 60 DAYS FREE TRIAL; you compare it with windmills that others sell at two to ten times our price, and if it doesn't find our windmill runs easier, has more power, requires less attention, easier to set up and handle (any farmer can easily set it up), pumps more water, runs in lighter wind, if you don't find it stronger, handsomer, better made and worth more than any other windmill made, return it to us at our expense and you are not out one cent.

\$11.12 buys our new 1906 Kenwood all steel, nonbreakable, everlasting windmill, which

anyone can set up in a few hours. \$12.08 buys our latest 1907 style, best and strongest all steel tower. Cut this advertisement out and mail or send us a postal card or a letter to us saying, "Send me your Free Windmill Offer," and you will receive a free windmill, postpaid, our latest big Special Windmill Catalogue, showing a great variety of steel towers, tower mills in all sizes, a great variety of steel towers, tower tanks, etc. you will get our Free Trial Offers, the most wonderful windmill proposition ever heard of.

THIS BIG 6-FOOT FULL SIZE COUCH FREE! If you let us send you a windmill or other goods, you will also get this great Free Couch Offer if you will write for our Free Windmill Address. SEARS, ROEBUCK & CO., CHICAGO

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor.

Before You Build

It shows how to build with the greatest economy and durability. **FREE** to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817) Chicago, Ill.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy whip complete without one. Price, \$1; postage paid any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

meeting was not as large as had been expected. What it lacked in size, however, was made up in enthusiasm. This meeting was presided over by Secretary F. D. Coburn of the Kansas State Board of Agriculture.

Miscellany

Students' Opinions of the Y. M. C. A.

At the beginning of the building movement in the Agricultural College, requests were sent out to several leading students for a short statement of their opinion concerning the work of the Y. M. C. A. The following are some of the replies:

"The Y. M. C. A. means more to me than any other organization in college. Through its work I have learned to develop the spiritual side of my life, which changes the view of a life-work from one of selfishness to one of service."—J. C. Cunningham, President Athletic Association.

"The Y. M. C. A. is the most important student organization on the campus, touching as it does the moral and religious phases of student life. The progressive steps taken in the last few years have placed it far to the front in value as a college auxiliary. Its best recommendation is the really effective, far-reaching work it is doing."—A. N. H. Beeman, Editor-in-Chief of Student's Herald.

"The Y. M. C. A. has been one of the greatest factors in my development while in college. It has given me something to do in Christian work and kept me out of mischief in idle moments, besides throwing me in the company of the best young men in school. It is indispensable in our colleges."—W. B. Banning, President Webster Society.

"I consider the Y. M. C. A. to be one of the greatest factors in a college man's life. It stands for pure, clean, active manhood and a strenuous life. Its members are the leaders in all student enterprises, such as the college papers, literary societies, and athletics. Its new student work is of inestimable value. It furnishes a social and spiritual development that the churches are unable to give and merits the most hearty cooperation of students and alumni in every detail of its work."—N. L. Towne, '04, Captain '02-'03 Football Team.

"Among college organizations the Y. M. C. A. stands without a peer. The other organizations, even the best, though they develop many cardinal virtues, leave untouched that part of man's nature which he himself is prone to neglect—his innate religious propensities. To me the Y. M. C. A., with its rapid growth, wide-spread influence, and magnificent outlook, presents strong attractions and unlimited opportunities for the development of all that is desirable, especially that princely quality, helpfulness to others. I am glad to be a member in so royal an organization." Geo. Gassner, Editor of The Jayhawker.

"When I arrived in Manhattan last fall, a perfect stranger, I was agreeably surprised to meet with a company of young men who seemed anxious to make me feel at home and to give me all the help and information possible. They were the Y. M. C. A. boys, who were working, not for personal gain, but from a feeling of good-fellowship and true brotherly kindness. I have found their association and friendship most helpful."—H. A. Ireland, Winner College Stock-Judging Contest.

"From observations in the last four years I believe that the good of the Y. M. C. A. is beyond estimation. Its influences for that which is pure and manly are found in all organizations of the college. I believe that no better investment for the college can be made than for the support of the Y. M. C. A."—Nicholas Schmitz, Business Manager of Students' Herald.

"The Y. M. C. A. holds a recognized place in college work and is worthy of good support. I believe that the erection of a permanent building will be of great value to the college."—H. P. Hess, Captain of Baseball Team.

"For the college the Y. M. C. A. means a better and more industrious class of students, a higher standard of scholarship, less rowdiness, and cleaner athletics. For the student it means a help toward a cleaner and purer life and a guide for him who is trying to follow where the Master leads."—Earl Evans, Manager Basketball Team, Member Belmont Quartet.

"The Y. M. C. A. has been to me a training school in the art of systematizing. Not only that it has been the home-like organization in college. I know it has influence and that it has been effectively used. In my four years of school I can see its effects both on athletics and in the literary

societies."—J. J. Biddle, President Hamilton Society.

"There is probably no student institution in any college more influential among the student body than the college Y. M. C. A. An organization that has for its object the harmonic training of mind and body that they may work in sympathy with the spirit can hold no other place. The Y. M. C. A. takes a student as he enters and by the end of his course it has helped him into the broader view of morals, science, athletics, and enterprise."—Tom L. Pittman, Manager Cooperative Bookstore, Captain Company "A."

"What the Y. M. C. A. has meant to me: (1) The privilege of Christian fellowship and association. (2) A closer spiritual relation to God. (3) A fuller appreciation of the love of Jesus Christ for men, and the responsibility and necessity of living a Christian life. I feel that the development I received in the Y. M. C. A. will prove to be a valuable part of my education when I am confronted with the future problems of life."—Howard D. Matthews, President Alpha Beta Society in Winter Term.

"The College Y. M. C. A. has meant a great deal to me. The benefit derived from its Bible study classes, the training received upon its committees, the acquaintance with its membership fostered by its social gatherings and atmosphere of help and goodwill, the good received from its religious meetings and high standards of Christian living, have all been of incalculable value to me and will help me in future life."—T. W. Buell, One of the Inter-Society Orators.

"Although not a member of the Y. M. C. A., yet I consider the organization one of vast importance and one which deserves to be fostered in this institution, perhaps, more than in some others, for two reasons: (1) Because of the large number of young men who work their way through college and often need its assistance; (2) on account of the large number of young men here. The work of this organization not only has its influence within the college halls, but also among the many homes represented here."—Carl Elling, President Senior Class, Second Place Winner in the International Stock-Judging Contest at Chicago.

"The Y. M. C. A., as we know it today, is one of the greatest spiritual factors in student life. Its object is the work of implanting in the lives of the boys a noble, clean, Christian character, which alone determines the true man. To allow this great work to grow, it is necessary that its accommodations be enlarged. To do this, and not interfere with the college, a building separate from the college and near the college campus should be permitted them, that they may keep in constant touch with the students."—T. E. Dial, Cadet Major.

Farmer's Elevator Companies.

Over seventy delegates, representing nearly 160 farmers' elevators of Kansas, Nebraska, and Oklahoma, met at Hutchinson April 3, for the annual meeting of the Farmers' Independent Grain Dealers of Kansas. This organization was formed a year ago, and is an association of farmers' independent organizations engaged in handling grain. It is in no sense a merger, no company holding any stock or interest in any other company. The meeting was called to order by C. W. Peckham, of Haven, the vice president, in the absence of President W. M. Kenton, of Chase. E. M. Black, of Preston, was secretary.

President Roosevelt was endorsed and the Kansas board of railroad commissioners condemned for alleged inactivity in behalf of shippers of the State. A strong anti-pass resolution was also adopted.

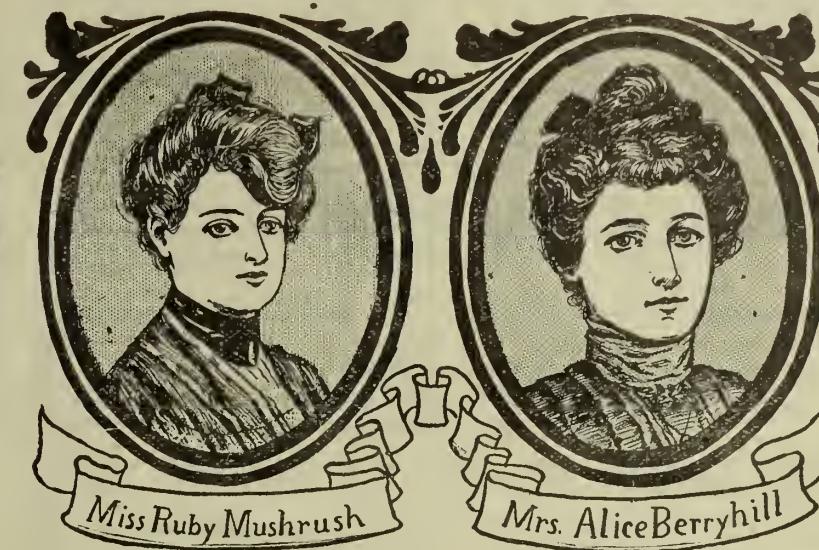
The by-laws of the organization were so changed that independent elevators of Nebraska and Oklahoma were admitted to membership in the Kansas organization and the officers have assurances that within sixty days the membership will be more than doubled, embracing practically all the independent elevators of the two States and the territory.

The farmers' elevators of Nebraska last year handled 17 million bushels of grain, the Kansas independent elevators handled 12 million bushels, and the Oklahoma independent elevators, approximately, 3½ million bushels. The elevators represented at the meeting have about 1 million dollars capital.

Arrangements are being made for the marketing of grain by a mutual company at Kansas City. Resolutions were adopted denouncing the Kansas City board of trade for suppressing information regarding markets, and for arbitrarily deducting 100 pounds from each earload of grain handled by its members; also favoring the consignment of grain to the National Board of Trade of Kansas City.

Women in Our Hospitals

Appalling Increases in the Number of Operations Performed Each Year—How Women May Avoid Them.



Going through the hospitals in our large cities one is surprised to find such a large proportion of the patients lying on those snow-white beds women and girls, who are either awaiting or recovering from serious operations.

Why should this be the case? Simply because they have neglected themselves. Female troubles are certainly on the increase among the women of this country—they creep upon them unawares, but every one of those patients in the hospital beds had plenty of warning in that bearing-down feeling, pain at left or right of the abdomen, nervous exhaustion, pain in the small of the back, dizziness, flatulence, displacements of the organs or irregularities. All of these symptoms are indications of an unhealthy condition of the female organs, and if not heeded the penalty has to be paid by a dangerous operation. When these symptoms manifest themselves, do not drag along until you are obliged to go to the hospital and submit to an operation—but remember that Lydia E. Pinkham's Vegetable Compound has saved thousands of women from surgical operations.

When women are troubled with irregular, suppressed or painful periods, weakness, displacement or ulceration of the organs, that bearing-down feeling, inflammation, backache, bloating (or flatulence), general debility, indigestion, and nervous prostration, or are beset with such symptoms as dizziness, lassitude, excitability, irritability, nervousness, sleeplessness, melancholy, "all-gone" and "want-to-be-left-alone" feelings, they should remember there is one tried and true remedy.

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fail.

The following letters cannot fail to bring hope to despairing women.

Miss Ruby Mushrush, of East Chicago, Ind., writes:

Dear Mrs. Pinkham:—

"I have been a great sufferer with irregular periods and female trouble, and about three months ago the doctor, after using the X-Ray on me, said I had an abscess and would have to have an operation. My mother wanted me to try Lydia E. Pinkham's Vegetable Compound as a last resort, and it not only saved me from an operation but made me entirely well."

Mrs. Alice Berryhill, of 313 Boyce Street, Chattanooga, Tenn., writes:

Dear Mrs. Pinkham:—

"Three years ago life looked dark to me. I had ulceration and inflammation of the female organs and was in a serious condition.

"My health was completely broken down and the doctor told me that if I was not operated upon I would die within six months. I told him I would have no operation but would try Lydia E. Pinkham's Vegetable Compound. He tried to influence me against it but I sent for the medicine that same day and began to use it faithfully. Within five days I felt relief but was not entirely cured until I used it for some time.

"Your medicine is certainly fine. I have induced several friends and neighbors to take it and I know more than a dozen who had female troubles and who to-day are as well and strong as I am from using your Vegetable Compound."

Lydia E. Pinkham's Vegetable Compound at once removes such troubles. Refuse to buy any other medicine, for you need the best.

Mrs. Pinkham, daughter-in-law of Lydia E. Pinkham, invites all sick women to write her for advice. Her advice and medicine have restored thousands to health. Address, Lynn, Mass.

A CONCRETE SILEO
Gedney Farms, White Plains, N. Y.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book "Concrete Construction About the Home and on the Farm," has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request.

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

The Kansas Farmer...

The Greatest and Best Advertising Medium for Reaching the Farmers of the Middle West, of

TOPEKA,

KANSAS

WHEN WRITING OUR ADVERTISERS PLEASE MENTION THIS PAPER.

Home Departments

CONDUCTED BY RUTH COWGILL.

Contentment.

"Brown and yellow and yellow and brown
Are choicest colors for my crown,"
The sunflower said; "I am content;
I wish no other ornament."

"Yellow and white," the daisy spoke,
"We're made, I think, for my own sake;
I scarce would want to show my face;
If other tints should take their place."

"Blue as heaven draped on high,
Blue as bluest spot of sky,
It is the shade I love the best,"
The violet cried with hearty zest.

—J. E. Everett.

Our World.

Our world the truest is the world of mind;
A loving world if all our thought are kind;
A holy world if what we think is holy;
A world of truth if truth is sought for solely.

I may, though, on this globe of soil, assert
I live not in a sticky world of dirt;
But one of thought and choice, desire
And will And hopes that throb and loves that thrill.

—J. E. Everett.

Easter Thoughts.

Easter, like Christmas, is a Christian celebration. It reminds us that Christ rose from the grave, proving to humanity the victory over death, and that life is just begun here on earth. It should indeed be hailed with joy and thanksgiving, and be made a day of rejoicing. When Christ rose from the dead, he said by the act, "I am the resurrection and the life." But that is not all. He is speaking through nature, his handiwork, and saying, "I am the resurrection and the life." Life is springing up everywhere. What so lately was brown and dry in tree and shrub is now showing life and verdure. The life-giving sap is coursing along under the bark, and soon the whole earth will be full of life and beauty. The seeds that have lain in the ground all winter will soon send forth leaves and blossoms, thus proclaiming victory over death.

To all who have had to bid farewell to loved ones and see them lain beneath the sod, the Eastertide is saying, "I am the resurrection and the life." Your loved ones are not there; what is there contains only the elements of the earth, and back to earth it will go. Christ ascended. Think of them as with him above.

The custom of sending flowers on Easter day is a pretty one, especially if sent to the shut-in or the lately bereaved and lonely. The giving of flowers speaks more than words. They need not be expensive hot-house flowers—indeed, the ones cared for in the home and cared for with loving hands are prized more than those that cost money. Bulbs of hyacinths, daffodils, jonquils, lilies of the valley, and others, if planted six or eight weeks before Easter, will be in bloom and make beautiful Easter gifts at a very little expense. Lovers and sweethearts exchange flowers at Easter, but why do not the husband and wife? They need the cheer and reminder that love is still in the heart even more than the young lovers. Why let love be buried beneath the rubbish of care and the common things of life?

Children enjoy the bright-colored Easter eggs and the custom of hiding and hunting them is great fun. The children of Washington enjoy a treat that every child is not permitted to do—I refer to the Easter egg-rolling at the White House. Girls and boys gather at the grounds Monday morning after Easter and enjoy rolling their eggs down the hill. This affair is witnessed by many spectators, including Senators and statesmen and often by the President.

The giving of Easter gifts is becoming more and more a custom. The gifts take the form of Easter symbols, such as eggs filled with confectionary, rabbits, or lilies.

Our Topeka Continental Sunday.

Under the above heading the Topeka Capital of December 5, 1905, said in part:

"Topeka in late years is becoming so liberal, that it leans backward. . . . Restrictions even of the most remote and incidental character upon the inclinations and whims of the people are cut of fashion, and the solid religious ideas that created in the country a series of generations of men and women whose opinions were convictions, who lived for something more than

pleasure and excitement and money-madness, have lost their authority."

It then went on to speak of the mischievous effect on the fibre of a nation when its Sabbaths are desecrated by the opening of the Sunday theater, to which might be added the ball games and open saloons and gambling dens, to say nothing of the Sunday excursions made specially enticing and "cheap" by the various railroad companies.

What is done in Topeka is done in greater or less degree in many other towns in Kansas, and the Sabbath desecration is not confined even to Kansas, but is wide-spread over the United States. It is the knowledge of these lamentable facts that has led such well-known persons as Wilbur F. Crafts, William Hubbell, Mary James, and others to plan a week from April 22 to April 29 inclusive, in which to give a prominent place to the various phases of the Sabbath question in the press, in the pulpit, in the Sabbath School, and other meetings held during that time. Can not every one who reads this article undertake to interest some minister and Sabbath school in putting forth some effort to influence the next Legislature to make the Sunday theater and ball games illegal?

Likewise can not every father and mother who reads this take pains to instill into the minds of their children that the Sabbath is a day holy unto the Lord? That Sunday excursions of all kinds, Sunday visiting, Sunday buying, unnecessary Sunday work, as well as neglect of the religious aspect of the Sabbath, are not conducive to the highest development or in keeping with the express commands of God, with their accompanying blessings as given in Isaiah 58:15, 14?

Free literature on this most important question can be obtained from the Woman's National Sabbath Alliance, 156 Fifth Avenue, New York.

ENGLISHWOMAN.

The Lord's Day Week.

The undersigned, in behalf of the societies we represent, appeal to all lovers of Christ in America to set apart April 22 to 29, inclusive, as Lord's Day Week, devoting as much of it as practicable, at home and in the regular church services, to thanksgiving, prayer, study, and service with reference to Sabbath defence.

Praise God, as ever, for the day of rest from toil, and also, in joyous communion with and love and service of our blessed Saviour, for a year that has brought some victories in the arduous warfare for the imperilled Sabbath. We note three among many.

(1) God has moved some of our governors, mayors, and district attorneys to make Sunday law supreme, especially over the saloon. Never before since the civil war have so many saloons been closed on Sundays, and never since then have so many pontifical papers and business men approved of such closing.

(2) He has led some railway managers to refuse to run Sunday excursion trains.

(3) He has brought together the various societies that seek to exalt the Lord's Day in hearty cooperation.

Pray God to arouse His people to press on vigorously for greater victories and to awaken employers and employees to realize the folly and curse of Sunday toll, and the moral blight of Sunday sport.

Study God's Sabbath Law as written in the Bible, in nature, and in history, all of which teach that Christian life and growth are impossible unless God has fullest opportunity on His day, to possess, cleanse, and beautify our whole being—lest the Sunday paper, or social function shall rob us of the soul's best inheritance. Study, also, in criminology and history the effect of Sunday sports that weaken the character of men and nations. Study habits and surroundings as related to Sabbath keeping, and how to make the Sabbath more richly bless personal life and the life of the church and community. And let all appeal to Congress to forbid Sunday work in the Money Order and Registry departments of the post-offices and in the National Capital. Let us also urge, regularly or frequently, State and National Legislatures to secure to all employees, who work on Sunday on the plea of necessity or mercy, fifty-two weekly rest days in each year as is done in Switzerland. Let us secure for the Sabbath in this annual week of prayer, a prominent

place in the press, and in the pulpit, the prayer-meeting, the Sabbath School and in the W. C. T. U., and the other reform meetings of that week and also during all other weeks of the year. Let us federate reform forces in each town so as to educate all the people as to the value of the Sabbath, by putting Sabbath literature into every house and by encouraging and assisting executive officers to enforce obedience to Sunday laws.

ROYAL

BAKING-POWDER

Absolutely Pure

A GRAPE CREAM OF TARTAR BAKING POWDER

It makes the most delicious and healthful hot breads, biscuit and cake

FREE FROM ALUM, LIME OR PHOSPHATIC ACID



Alum baking powders are unhealthful. Do not use them for raising food under any circumstances. So detrimental are alum baking powders considered, that in most foreign countries their sale is prohibited. In many States in this country the law compels alum powders to be branded to show that they contain this dangerous acid, while in the District of Columbia, Congress has prohibited the sale of all food that contains alum.

Alum baking powders are sold to consumers at from 10 cents a pound to 25 ounces for 25 cents, or 25 cents a pound, and when not branded may generally be distinguished by their price.

place in the press, and in the pulpit, the prayer-meeting, the Sabbath School and in the W. C. T. U., and the other reform meetings of that week and also during all other weeks of the year. Let us federate reform forces in each town so as to educate all the people as to the value of the Sabbath, by putting Sabbath literature into every house and by encouraging and assisting executive officers to enforce obedience to Sunday laws.

Rev. J. B. Davison, secretary Wisconsin Sunday Rest Day Association; Rev. S. T. Mutchler, M. D., secretary Pennsylvania Sabbath Association; Rev. M. D. Kneeland, D. D., secretary New England Sabbath Protective League; Rev. W. F. Crafts, Ph. D., superintendent International Bureau of Reforms; Rev. J. G. Shearer, A. B., secretary Lord's Day Alliance of Canada; Rev. Alex Jackson, Ph. D., secretary the Cleveland Sunday Union; Rev. Edward Thomas, D. D., L. L. D., manager Sunday League of America; Rev. Frederick J. Stanley, D. D., secretary American Sabbath Union; Rev. Wm. S. Hubbell, D. D., secretary New York Sabbath Committee; Mrs. Mary D. James, honorary president of the National Woman's Sabbath Alliance; Mrs. Varila F. Cox, superintendent Sabbath Observance Department of the National Woman's Christian Temperance Union.

Proper Food and Feeding.

The amount of advice we have had concerning what to eat and what not to eat, would fill a book. If we eat bolted flour we may expect dyspepsia; if we eat meat look out for lithemia; in pork trichiniasis may be in hiding, and in richest milk the feverish bacilli is doubtless sporting.

And there is much in what we eat, much that concerns our health and strength, but there is much in the way we eat it. It is well to look out for germs, but the most virulent can not stand a bath in good, healthy gastric juice. It is necessary that germs come, one way or another, but let it be woe unto them when they strike the gastric membrane.

Children nowadays are trained to do most everything that is useless and expensive, let us train them to chew, to eat and drink slowly.

A glass of milk swallowed at a gulp is to revert to the way of the ostrich, and to invite indigestion and feed bac-

teria, but to sip it slowly and leisurely is to make the warm, rich blood and the strong, throbbing heart.

Slow eaters are small eaters, because hunger is appeased physiologically through the nervous system. Lots of people never eat, properly speaking, they simply fill up. The delicate nerves of the stomach, which would tell us of hunger appeased, are overwhelmed and stunned by the deluge of drink and the rain of half-masticated food. So they lie silent, and the nerves of ordinary sensation give the signal when we begin to crowd our diaphragm up about the collar bone, and we stop, not because we have enough, but because we are loaded and another mouthful might explode us.

It has been shown experimentally that it is very hard to infect a healthy animal by way of the alimentary tract, though it be fed upon the most virulent of the pathogenic germs.

It is next to impossible to avoid drinking at some time or other the typhoid bacilli, but we can do much towards improving the condition of the digestive organs.

How many of us take a glass of water in one stream, and yet even a horse takes time to drink.

Proper eating and drinking will go far towards rendering harmless many of the bacteria that threaten our life on every side.

There is something in what we eat and drink, but there is a great deal in the way we eat and drink it.—Health.

The Foot-Path to Peace.

To be glad of life because it gives you the chance to love and to work and play and to look up at the stars. To be satisfied with your possessions, but not contented with yourself until you have made the best of them. To despise nothing in the world except falsehood and meanness, and to fear nothing except cowardice. To be governed by your admirations rather than by your disgusts; to covet nothing that is your neighbor's except his kindness of heart and gentleness of manners. To think seldom of your enemies, often of your friends, and every day of Christ; and to spend as much time as you can, with body and with spirit, in God's out-of-doors. These are little guide-posts on the foot-path to peace.—Henry Van Dyke.

The Young Folks

Plant the Trees, Children.

BY REV. DR. C. S. PERCIVAL.

[This song is printed by request that school children may learn it for Arbor day.]

Air: Ring the Bell, Watchman.
Round the green play-ground the dear
children stand,
Joy in their faces and shovel in hand,
Waiting a word to be borne on the
breeze—
Ready for the welcome mandate,
"Plant, plant the trees."

CHORUS.

Plant the trees, children, plant, yes
plant.
Plant for a joy that the future will
grant.
Good Kansas sends forth her word on
the breeze—
Joyfully obey the summons: "Plant,
plant, the trees."

When you are old you may bask in the
shade
Which by the growth of this planting
is made.
Your children's children, so Heaven
decrees,
Will rejoice you heard the summons,
"Plant, plant the trees."

CHORUS.

Plant trees of knowledge where ignor-
ance reigns;
Plant trees of virtue on sin's arid
plains;
Make of yourselves "trees of Right-
eousness;"—these
Plantings fill the world with beauty:
"Plant, plant the trees."

CHORUS.

When having passed to the happier
land.
Fast by the "Tree of Life" joyful you
stand,
Gladly you'll learn how the Saviour
decrees
Earthly planting blooms in glory:
"Plant, plant the trees."

Fleetfoot; The Autobiography of a Pony.

CHAPTER III.—HOMeward Bound.

It must have been quite late in the afternoon when Jake (his nap completed) was prompted to rise. He got up slowly and shook himself, then gazed listlessly at the herd of cows approaching from the distance, their bells tinkling clearly in the still air. Finally his glance lit on me; at first he looked a little surprised but the next moment seemed to remember the situation perfectly. Not far away was a spring from which issued cool, sparkling water; going to this my friend quenched his thirst, mutely suggesting that I should do the same.

Owing to the smallness of my stature the spring was not a handy place for me to drink, and I had almost to stand on my head in order to reach it. While in this uncomfortable position I was startled by the hurrying clatter of many hoofs, and almost at the cost of my life I placed my feet on solid earth again. Just then a loud squeal came from somewhere not far from me and I was surprised to see Big Jake balancing himself on his front hoofs while his hind legs sawed the air in a most energetic manner. Realizing, as I did, what an effort those acrobatic exercises must be on my companion, I could not help feeling that something unusual had called them forth.

My doubts and fears were soon settled, however, for the sounds of the hoof-beats ended almost as soon as Jake's squeals began, and the sight of a troupe of snorting horses a short distance off, anxious yet fearful to approach nearer, told me that it had been Big Jake's sole intention to keep his former associates at bay. I instinctively understood that it was more for my safety than for any other reason that Jake had declared war against his former friends, and I in a vague way was thankful for his interference.

After more loud squeals accompanied by vigorous kicks the group of horses were forced to depart whence they came, and as they disappeared from view, Jake gave me a self-satisfied look from under his long hair, and then calmly proceeded to crop the tender grass.

No other interruption coming our way, my valiant friend started on a slow canter across the pasture and I trotted closely behind.

Presently we came to a high wire-fence in the middle of which was a wooden gate, the fence separating the pasture from the road. The latter was still wet from the recent rains and unsightly ruts were made by the passage of heavy vehicles, but on either side the grass grew fresh and green and flowers of many hues smiled and nodded in the evening breeze.

We halted at the broad well-built gate at a loss to know what next to do. I, at least, was puzzled and had I been alone would never have even considered getting out on the road, but Big

Jake seemed equal to the solving of all problems, for just as soon as he assured himself that the lock was firmly fastened, a new plan at once came into his wise old head.

He turned round slowly, then backed with his whole strength against the gate near the hinges, and gradually the heavy piece of timber lifted and parted, allowing us to pass from the pasture onto the highway. Jake, pleased with his skillful management, started off briskly seeming to well know where he was bound for, and I almost kept up with him, although I was by this time both hungry and tired.

It seemed to me quite a long time before we turned into a wide lane bordered on either side by tall drooping trees. At the end of this lane was a large, grassy yard in which stood a brown house, big and comfortable looking, with many porches and windows; but instead of going straight on as I had expected him to do, Big Jake turned his course to one side and we were now on a narrow pathway. My friend evidently felt himself very much at home, and though my heart beat unnecessarily fast, I gained confidence as I watched Jake's easy-going behavior.

Having already slackened his pace to a slow walk he now came to a standstill, and, as he rubbed his chin on the topmost rail of the fence, he looked with much interest at a team of white horses which advanced slowly through a plowed field some distance away. As they came nearer, I noticed that they were decked out in new harness adorned with numerous buckles which shone brightly in the departing rays of the sun.

The white horses were drawing behind them a machine that said "click, clack, click, clack," as it moved; but most particularly did I observe the driver who wore a wide, flappy straw hat and sat on a round box and carried a long, wicked-looking whip in one of his hands.

"Gee up Clare, Clare! Samson!" he admonished, then sang a short song about "When we go marching home."

In the meantime Jake had made a discovery. Right over the fence the inquisitive nose went (unmindful of the rails which fell in a shower about us) and when it again came to the surface the heavy jaws were crunching delightfully and from between his lips dropped the tell-tale grains of yellow corn that he had stolen from the well-filled sacks which leaned against the fence.

The first mouthful disposed of before fortifying himself with another supply, Jake gave a glad whinny of recognition to the two white horses who immediately responded in a similar way.

"Gee up Clare. Get up Samson—Clare! Samson! whoa!"

The driver threw himself from his seat within a few feet of where we stood, and I jumped backward with such force as to send a barb on the wire-fence its full length into my flesh. The effect was like that of a bumble-bee sting. This mishap of mine passed unnoticed, for the driver was very busy unhitching his team, while Big Jake was cramming himself with the contents of the sack, which had by this time decreased to a marked extent.

In due season he was discovered with head ear-deep in mischief, but it seemed out of the question to bear malice to good-humored Jake, and the driver instead of punishing him pinched his neck playfully, asking where he learned to steal "seed-corn." Then the stranger's eye alighted on me for the first time. After a surprised stare he muttered under his breath, "Well I'll be doggoned."

CHAPTER IV.—BARNYARD DIFFICULTIES.

Following Jake's guidance I found myself in a lot strewn with corn-cobs. Some large buildings were scattered about and nearly all had wide doors and windows.

I began to grow frightened and drew near my protector as I beheld the growing population of the lot, which had at first seemed empty.

The man who had been planting corn came in with his team through the opposite gate, and leading the tired, thirsty animals to a long trough began to water them from a blue pump. At the pleasant, splashing sound a drove of hogs, large and small and of varied colors, came rushing out of a near-by shed uttering joyful squeals as they approached, and were given their share in troughs set low on the ground. Then a tall, proud turkey walked side by side with a baby calf no larger than myself. Hardly had they reached the well when the gate was thrown open and a dozen or more

The Standard Calicoes

"Simpson Prints" were first made in the days of thoroughness, and made to last; made so well that they became the standard, and have been ever since. The same old principles are strengthened with new ideas. Better designs are used than ever before and Simpson-Eddystone Prints are now far ahead of what they used to be.

Ask your dealer for Simpson-Eddystone Prints. In Blacks, Black-and-Whites, Light Indigo-Blues and Silver-Greys, Shepherd Plaid Effects and a large variety of new and beautiful designs.

Thousands of first-class dealers sell them.

The Eddystone Mfg Co (Sole Makers) Philadelphia



LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,**

New York

BARGAINS

Chinaware Sets, 100 pieces	\$9
Clothes Wringers, new.....	\$1
28 Pieces Table Cutlery, good plate.....	\$2.50
Sure-Cutter Shears and Scissors, 2 pairs.....	50 cts
Wade & Butcher Razor Strap and Bone.....	\$1.00
\$1.00 box Medicated Toilet Soap.....	35 cts
Headquarter for Watches.....	75 cts. to \$18.00
Black Gloss Buggy Paint, gallon.....	\$1.50
Gasoline Stoves, 2 burners.....	\$2.75
Poultry and Stock Foods, packet.....	15 cts
Cigars, per 100.....	\$1.50 to \$2.50
Washing Machines, none better.....	\$3.25
Send for Catalogue of many snap bargains.	
Agents wanted. New Process Mfg. Co., Dept. 50, Lincoln, Kans.	

The Kansas State

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address.

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS

The American Boy

MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World

"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year)..... 1.00
Kansas Farmer, 1 year..... 1.00

Total \$2.00
Both 1 year for..... \$1.50

Address,

KANSAS FARMER CO.,
Topeka, Kansas.

ANYONE WISHING

UNITARIAN SERMONS and PUBLICATIONS
SENT FREE, may address Mrs. F. O. Leland,
Concord, Mass.

something had happened. We did our best but it was too late, for poor 'Queenie' was beyond help. We looked everywhere for the colt but not being able to find it decided that it must have gone down also. It would have been a blessing for the poor little beggar if it had; death by slow starvation is not a very pleasant fate to look forward to."

"It would have been a blessing for me anyway if the muddy waters had swallowed the brat" broke in Joe, who was beginning to recover from his injuries, which did not appear to be as bad as he at first thought.

"I dread to tell the kid," remarked another of the men as he prepared to lead the horses away, "the loss of 'Queenie' will break his heart, and the worst of it is the whole affair happened through carelessness; that old well should have been attended to long ago."

The youth who had teased Joe in regard to the leak I administered slid from his horse, and I was surprised to note the solemn look on his face.

"Poor Lyall," he said, "all this comes from his having a dad who is half lawyer and half farmer."

"That's the trouble and nothing else," returned an angry voice as its owner tried in vain to piece together harness that had been broken in the recent fray. "A man with a large farm has no right to keep a law office in the city. Everything on this place seems possessed (here he gave an impatient jerk at the lines which caused the horse nearest him to glance around with inquiring brown eyes), and a lot of us fellows hardly knowing what to do next and no one to go ahead."

At length the horses were stabled, and as the confusion dwindled down to a few "baas" and grunts, a shining buggy drawn by a handsome, spirited team came into the barn-yard. A tall, broad-shouldered man sprang lightly from the scat and was followed by a slim boy of seven or thereabouts who held in one hand a bright tin pail. The little lad greeted the workmen with shouts of welcome, and started at once to assist his father in unhitching the team.

I soon learned from the conversation of the men that the fair-bearded newcomer was Mr. Dearcot, the owner of the farm, and spoken of as "the boss" when not present.

Whatever might be his ignorance of agricultural matters, it was evident that a strong liking existed between him and his hired help. It seemed as if with his coming all discontent and irritation vanished from the men's faces as they cheerfully came forward to meet him, some offering to help with the horses, others asking advice concerning the morrow's work. He was so gentle of speech and kindly of manner that it was small wonder his helpers were encouraged by his presence.

"I know you fellows must be tired enough dragging through that sticky mud all day," he said sympathetically. "I just thought by the condition the roads are in that a person could hardly walk through the west field to-day much less farm."

The men smiled indulgently and one remarked: "We were the only ones who tried to plant corn to-day. I'm afraid the ground is too water-soaked to allow our work to count for much, but if it doesn't rain to-night I think we will make great progress the remainder of the week."

"Yes, but there is every likelihood of a heavy shower before morning; even now it is thundering," replied Mr. Dearcot as he drew off a pair of flimsy kid gloves and surveyed the oncoming clouds with a critical eye.

Every moment gaining courage I advanced until I was within a few inches of Mr. Dearcot's pretty team of golden brown horses, and they, not being used to such a midget as myself, drew long, frightened breaths and curved their shapely necks. Then for the first time I was seen by the newcomer. The boy bounded forward with a happy laugh, crying, "It's my pony's colt. Where is Queenie? Course she wouldn't stay away in that old pasture; she wanted to come home."

Poor Lyall did not know what had happened, but the man whose name was Joe put his arm around the lad's shoulder and told him how "Queenie" would never come home any more; how she had gone down in the deep, old well because the wind had blown the surrounding fence away. As kindly as the matter was explained, Lyall, child-like, refused to be comforted.

"It's a mean shame," he sobbed, his slender figure shaking with wrath and grief. "Oh, why did we turn my pony out to die?"

With a motion which betokened his disgust with the world and all that it now contained, he hurled his tin buck-

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he was long, and lots slimmer than Mr. Dragon-fly. His wings were glistening and thin like lace, and he had three long, long tails out behind

him."

"Well, he

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wiskard, Topeka
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Suyer, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).

Women's Club, Logan, Phillips County (1902).

Domestic Science Club, Osage, Osage County (1888).

Ladies' Crescent Club, Tully, Rawlins County, (1902).

Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).

Cyclito Club, Highland Park, Shawnee County (1902).

Cultus Club, Phillipsburg, Phillips County (1902).

Literateur Club, Ford, Ford County (1903).

Sabean Club, Mission Center, Shawnee County Route 2 (1899).

Star Valley Women's Club, Iola, Allen County (1902).

West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).

Fortnight Club, Grant Township, Reno County, (1903).

Progressive Society, Rosalia, Butler County (1903).

Pleasant Hour Club, Wakarusa Township, Douglas County (1899).

The Lady Farmer's Institute, Marysville, Marshall County (1902).

Women's Country Club, Anthony, Harper County.

Takka Embroidery Club, Madison, Greenwood County (1902).

The West Side Study Club, Delphos, (1902).

Prentiss Reading Club, Cawker City, Mitchell County (1903).

Cosmon Club, Russel, Kans.

The Sunflower Club, Perry, Jefferson County (1905).

Chaldean Club, Sterling, Rice County (1904).

Jewell Reading Club, Osage County.

The Mutual Helpers, Madison, Kans. (1906).

West Side Study Club, Delphos (1906).

(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Art Program.

JEAN FRANCOIS MILLET.

I. Millet—his early life and training.

II. Preparation for his life work.

III. "The Sower."

IV. "The Gleaner."

I. The early life of this great artist was spent in a little village of France. He received his training principally from a kind father and mother and a religious and loving grandmother. He cared nothing for school, but like children of his artistic nature, preferred the field for his school and nature for his books. His was the simple life of the peasant and a pen picture of it may be both pleasing and instructive.

II. At about eighteen he left the field with his father's permission to prepare himself for his chosen work. This paper should treat of his life from about this time until he begins to paint for salons and for compensation. Many were his discouragements and disappointments, but never did he swerve from his purpose and success crowned his labors at last, although his true merit was not discovered and acknowledged till near his life's end.

III. "The Sower" may not be called a pretty picture, but it is true to life and nature. This was one of his prominent characteristics. He would be true when the French people would insist upon his making beautiful peasant girls and handsome men. He would say "your pretty peasant girls are not fit to take up fagots, to glean under the August sun, or draw water from the well."

IV. In the study of Breton you remember this picture was mentioned in connection with his "Gleaners." It will be helpful to make a study of the two pictures again. It will help one to know the real worth of a picture to give much study and thought on these great masterpieces—and the more they are studied, the more one sees of their beauty and worth. A description of these pictures as they seem to one will be very helpful, especially to the writer.

The Club President.

Helen Winslow says in speaking of what is expected of the president of a club:

"The president is looked upon as guide, philosopher, and friend—yes, more. She is expected to have a definite policy—as different as possible from her predecessor's in too many instances—to be ready to represent the club in public ways at a moment's notice, always well dressed and gracious, to arrange a line of study for her club, to keep in touch with every member, and to do several other things into the bargain. If there are snags in the club's parliamentary path, she is expected to remove them. And after she has done her best there will usually be someone who is able to find where she has fallen short of or exceeded her authority. She should then be careful not to commit her club to any action, no matter how righteous it appears to her individual mind, without the endorsement of the members."

She will see that her voice is never swayed by excitement, that her temper is always cool and collected, and that she is not governed by personal likes and dislikes. If she must call a member to order, she will do it in a thoroughly impersonal manner and with no display of irritability. If this spirit is lacking, and the president allows her voice to be a trifle sharp, sympathy will be against her and with the offending member every time, for democracy reigns on the floor of a woman's club as much as it does in a ward caucus."

INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright 1906, by David W. Clark.)

Matt. 28:20; Eccl. 5:1-7; Psa. 51:6.

April 8, 1906.

Our Pledge and How to Keep It.

The expression in definite terms of a definite purpose is of first importance. The advantage of it can hardly be overestimated. In business it takes the form of a charter or contract in which the intention is defined, or the parties of the first and second part agree and consent to the terms. In government it takes such shape, for example, as the Declaration of Independence. In the religious life it is a creed, covenant, or pledge. In its best form it is not so much an expression of metaphysical opinions about doctrines as an affirmation of a desire to be something and to do something. The immanence of Jesus is the greatest aid in measuring up to the expressed ideal (Matt. 28:20). One stands or falls to himself. He knows whether or not he is keeping faith with his expressed ideal (Psa. 51:6). Too much talk about one's ideal is to be deprecated. Be not rash with thy mouth (Eccl. 5:2). One is to be, not say. Let other people do the saying.

State Temperance Union Convention.

EDITOR KANSAS FARMER:—The Kansas State Temperance Union will hold its annual convention in Topeka May 9, 10, 11, 1906. Nothing has been spared to make this convention the most notable in the history of prohibition in Kansas. The many attractions would be sufficient for a good Chautauqua Assembly. They will but reflect the character and the vast amount of work that is being done throughout the State.

There is scarcely a victory recorded in the State during the past year that the Union has not been directly connected with either conducting the fight or giving valuable assistance. In some places the fight has been long and bitter; in others a stirring up of the sleepy sentinels was all that was necessary. By careful and wise movements, the Union has largely assisted in bringing some of the best men of all parties before the voters of the State.

Every community in the State should be represented at the convention. If there is cleaning up to be done send some one and get acquainted with the force that is at work; if not, send some one and be identified with the force that will carry the warfare into the less fortunate districts of the State. Every temperance society and Church and Sunday school and Young People's Society is entitled to three delegates.

Dr. Louis Albert Banks and Rev. Father James M. Cleary, who are among the many attractions of the convention, are glants in the temperance cause. You should meet them.

An open rate of a fare and one-third from all points in Kansas and from Kansas City and St. Joseph, Mo., to Topeka and return has been granted by all railroads; excursion tickets to be sold on May 7-10 inclusive, good to return leaving Topeka until and including May 14, 1906. ROBERT MORRIS, Sec'y.

The season for seed planting is almost here and progressive farmers generally have either secured their seed or are casting about to find the best place to buy it. For some time we have been carrying an advertisement of seed-corn for W. W. Vansant & Sons, of Farragut, Ia. These gentlemen are seed-railers. They have made a study of seed-corn breeding for severay years and every grain of corn they offer for sale is raised under their personal supervision on their own farms. After it is gathered it is handled in the best possible way to make it produce the best results as seed. Being interested in building up a large business on their seed-corn, the members of this firm are very careful about cultivation, handling, and selection of their seed. In addition to this they have the very best-known varieties. It is a good plan to write them if you are in need of seed-corn. Address W. W. Vansant & Sons, box 54, Farragut, Ia.

Very Low Rates Tuesdays.

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

D&S

D&S

ARE YOU SAFE

FROM DAMAGE BY LIGHTNING?

How do you feel when a heavy cloud comes up and the lightning is flashing around you?

Do you get where you can see the barn and after each stroke wonder where it struck and almost hold your breath lest the next one strikes the barn or perhaps the house?

How many times have you got up in the night to see a neighbor's house or barn in flames and feel that you are lucky that it is not your buildings? You probaly never lost more than a stack of hay or a cow. But are you safe now? How do you know the next storm will not do the damage?

If you have our Lightning Rods on your building you are in no danger. We guarantee to keep the lightning out of your buildings.

Our booklet, "The Laws and Nature of Lightning and How to Control It" is full of valuable information, and we will send it to you free for the asking.

When buying rods look for our Trade-Mark (D and S) on the end of the spool, and make the Agent show you his Agent's Certificate. This will insure you fair treatment; will show that he is our authorized Agent, and will protect you from the fellow selling an imitation. You will find nothing else as good as the genuine Dodd and Struthers Rod.

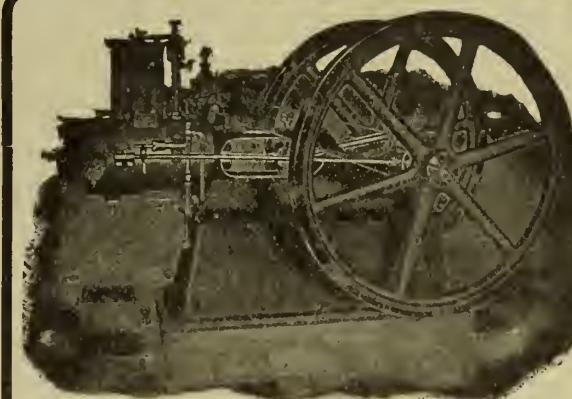
Yours truly,

DODD & STRUTHERS

Des Moines, Iowa

D&S

D&S



Dempster Mill Mfg. Co.

Manufacturers of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

"Dempster Gasoline Engines 2 to 30
H. P.—2 and 4 cycle Horizontal or Vertical—for any duty."

Western Made
and
Well Made

Factory, BEATRICE, NEB.

Branches:—KANSAS CITY, MO., OMAHA,
NEB., SIOUX FALLS, SOUTH DAKOTA.



DEMPSTER IMPROVED
STEEL WIND MILL
NO 7

DEMPSTER
MILL MFG. CO.
BEATRICE, NEB.

ROLLER RIM GEAR

THEY STOP THE
NOISE AND LESSEN THE WEAR
LATEST, STRONGEST, BEST.
FACTORY BEATRICE, NEB.

Real Fence Economy

consists of getting the greatest possible fence value for the money expended. We offer you the best fence value obtainable and here is why we can do it.

We Sell Direct from Factory to the user of the fence. Thus we avoid all unnecessary and expensive handling and storing and cut out all profits and commissions of go-betweens. This makes a large saving. It enables us to spend more for good material and proper construction.

The Continuous Stay is what gives Advance Fence its superior strength. In Advance Fence the stay is never cut but runs continuously up and down across the fence for many rods without an end. Thus we preserve and utilize all the strength of the wire about half of which is wasted in fences with cut stays. Our method of construction costs a little more but it's worth while.

30 Days' Free Trial. Place your order with us for what fence you need and if after examining it you do not like it you can return it at our expense and get your money back. Don't you think this is a fair offer?

We Prepay Freight and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices.

ADVANCE FENCE CO.
3773 Old Street Peoria, Ill.

ADVANCE

Miscellany

Cultivating Corn.

PRESS BULLETIN NO. 119, OKLAHOMA EXPERIMENT STATION.

In considering this operation in corn raising, it should be borne in mind that the object of cultivation is to keep the soil in the most desirable physical condition by controlling as far as possible the amount of moisture and air in it and to destroy the weeds that hinder the growth of the corn in various ways. The yields of this crop depend much upon the skillfulness and thoroughness with which this operation is performed.

The best method to follow in the cultivation of a corn crop will depend upon the character of the soil; the way in which the seed bed has been prepared; the weather conditions during the season; the number and kinds of weeds the soil is infested with and the stage of their development at the time the corn is cultivated; the age of the corn plant when any particular method is to be used; and the conditions that follow any cultivation. The fundamental truth is, in order to obtain the best results in cultivating corn, the method must be varied to meet the conditions named above, so there is no best way that applies to all fields at any time. While this is a simple fact, many do not seem to realize it, as persons can frequently be found who prescribe deep cultivation for all cases, while others claim shallow culture the only method permissible.

KEEP SURFACE ALWAYS MELLOW.

In cultivating corn, there is one point that all should agree upon, and that is that the surface of the ground should be kept mellow and loose at all times in order to prevent loss of moisture by evaporation and to keep the weeds from getting a start. This should be followed from the time the seed is planted until the grain is ripe. Just what operations are necessary to accomplish this and what else is necessary at different times and under varying conditions, is where individual judgment is called for.

CULTIVATE EARLY.

Many make their first mistake, and it is a very serious one, by neglecting cultivation. Frequently the soil is not stirred until the corn is large enough to cultivate with the old-fashioned large shovel cultivator. This usually results in the corn receiving a severe check, due to the surface being baked and hard while the corn is small and tender, and, further, the weeds generally get a start that something in the nature of a plow is required to subdue them. Often this is only partially accomplished and many are left to damage the corn during the entire season. The harrow is one of the best implements to use for these early cultivations and it should be started whenever rain has fallen to pack the soil or whenever weeds have started. Quite often this first cultivation is called for before the corn is up, and, following this, the harrow may be used two or three times. Part of the teeth may or may not be removed. A hinged harrow is manufactured that works very well on listed corn where the rows are reasonably straight and uniform in width. Cultivating in this manner, much can be accomplished in a day at small expense.

After the harrowing stage is past the method of cultivation should vary as the conditions demand. A soil is in its best condition for the growth of corn when it is open or loose enough to allow a fairly free circulation of air and moisture and penetration of the roots. This condition exists in most soils, particularly where the seed bed was properly prepared by good deep plowing or listing. When this is the case all that is desirable in cultivating is to keep two or three inches of the surface of the corn ground stirred to prevent the growth of weeds or the crusting of the surface that allows a loss of moisture by evaporation. How frequently the soil must be stirred to maintain the above condition will depend upon the number and kinds of rains and the foulness of the soil with weed seed.

SOME CASES.

There are cases where deeper cultivation than that mentioned above will be desirable and necessary. A heavy close soil may be too compact, due either to poor preparation of the seed bed or the running together of the soil by heavy dashing rains. When in such a condition, a good deep stirring, six to seven inches, with the large shovel

cultivator will greatly benefit the future growth of the corn. Again, in a season of excessive rainfall, deep cultivation may be applied in order better to aerate the soil and dry it out. Further, weeds may have become so large, due to neglect or weather conditions that prevented checking them at the proper time, that good deep cultivation is necessary in order to dig them out and cover them up. Certain fields that are infested with deep, strong-rooted perennial weeds will require the same treatment.

DAMAGE BY BREAKING CORN ROOTS.

The corn is often damaged by the roots being broken in deep cultivation. This is not the case to a serious extent early in the season when the corn is small, but the check to the crop may be quite marked if cultivated deep late in the season when the corn has reached a height of two to three feet or more, particularly if the previous cultivation has been shallow or neglected. If dry weather happens to follow such a treatment, the damage to the crop is much increased. When not followed by some form of cultivation that will level down the ridges left by the large shovel cultivator, the ground will dry out quite deeply and in the furrows between the ridges, this drying readily reaches the roots of the corn. To obviate this as much as possible, when the old-fashioned large shovels are used, the work should be followed as soon as possible with something to level down the surface. Deep cultivation is hard, slow work and under certain conditions may damage the crop. Unless there is something to be gained by it, as mentioned in some of the cases above, it should not be followed.

As handled by the average farmer, usually the corn field will require the use of the deep cultivator as well as the surface cultivator, but he makes a mistake when he plows his ground every time the surface needs stirring or tries to make one or two very deep cultivations answer instead of several shallow ones extending over the season. The mistake of too much deep plowing was partially caused by the kind of cultivators usually available a few years ago. They were suitable for nothing but deep stirring of the ground. Now the up-to-date cultivator is equipped with small shovels and more of them, three to five on a side instead of two, as formerly. This enables stirring all of the surface without going the depth of a plow, as was the case with the old big shovels. With the small shovels, the ground is left level, the work required in pulling the cultivator is much less, and more ground can be gone over in a day, making more cultivation possible. Each cultivator should be purchased with the small shovel gangs and the large shovel gangs; as has been stated, either may be needed under certain conditions.

The mistake of cultivating corn deep when the conditions do not require it or make it advisable causes considerable loss in the crop, but not carrying the cultivation on long enough during the season, causes fully as much damage.

WHEN THE CORN IS LARGE.

When the plants are too large to allow the use of a two or three-horse cultivator, the one-horse implement should be used. This keeps the surface mellow and free from weeds and the corn has as favorable a show as possible during the most critical period of its growth and that is at silking and tasseling time and during the growth of the ear. On the other hand, where the cultivations are not continued by the use of the one-horse cultivator, usually the ground is hard and covered with weeds just when the most favorable conditions are required and the corn suffers severely.

Variety Test.

EDITOR KANSAS FARMER:—Some eighty different varieties of corn will be planted at the Kansas Experiment Station as a variety test. These varieties include a large number of "farmers'" corns, seed of which has been sent to the College by farmers in different parts of the State. Other samples have been secured from outside the State, from Iowa, Illinois and Nebraska. These include most of the well-bred or "pure-bred" varieties of corn grown in the States named. The purpose of this experiment is to determine which are the hardiest and best-producing varieties of corn for planting in Kansas.

The Agriculture Department is also carrying on some co-operative experiments in testing different varieties of corn with farmers located as follows: Burden, Moran, LaHarpe, Baileyville, Linn, Norton, Dresden, Hill City, Cas-



I CURED MY RUPTURE

I Will Show You How To Cure Yours FREE.

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you. Write to-day. Capt. W. A. Collings, Box 109 Watertown, N. Y.

lowed these crops only two seasons since the trial begun, yet marked differences in the yield of corn from the different plots have been observed, and the accumulated data of several years should give valuable results.

A. M. TENEYCK

What Is Barnyard Manure Worth Per Ton?

It has always been a difficult thing for the farmer to determine just what barn-yard manure is worth per ton as compared with commercial fertilizers. Of course manure varies greatly according to the way it has been handled. It is safe to say that its highest value is when freshly made. It can be hauled to the land in that state, before fermentation and evaporation have robbed it of its nitrogen, and it will become incorporated with the soil at its highest value.

Prof. Harry Snyder, of the Minnesota Agricultural College, is one of the best thinkers and writers on this subject in the land. He adduces the following statement in Farm Stock and Home, based on actual facts, to show the worth of barn-yard manure worth \$2 to \$3 per ton. He states that its chemical analysis shows it to be worth \$2 to \$3 per ton.

If applied to a worn-out soil at the rate of eight tons per acre, the increase in corn the first year will be twenty to twenty-five bushels per acre. This would be worth \$7. The next year the land will produce six bushels more of wheat, worth say \$4.50. If seeded to clover it would yield at least a ton more hay, worth \$5. Following the clover with wheat again, a gain of eight bushels per acre, worth \$6, will follow. Then will come twelve to fifteen bushels more of oats, worth \$1. He sums up the increase of value as follows:

"The increase in the five crops, due to the dressing of eight tons of farm manure and the production of clover, is alone worth \$25.00, making the value of the manure \$3.00 per ton distributed over five years, equivalent to sixty cents per ton as the annual crop-producing value of the manure. These are not excessive increases in yield; in many cases even larger returns are secured from the application of manure and the production of clover on worn-out land. Thus it will be seen that it is a conservative estimate to consider the manure alone worth at least \$3.00 per ton because of the increased yield secured from its application, and the additional yield is secured with little additional expense in working the soil."

Those of our readers who follow the cow census returns have noted how often comes this comment:

"Manure thrown out and hauled when convenient; liquids wasted."

The farmer who does that is following an old custom and doing no reading and thinking. Reading and thinking would tell him that there is never a better time to load that manure than every day in the stable; that when once loaded it can never be taken to the field more cheaply; that it will never go there in a shape to lose less of its value; that the cost of labor is less in winter than in the spring, when he is hurried with other work; that the barn-yard is thus kept free of a mass of filth; that the manure will be dissolved by the snow and rain, kept from fermenting and heating and become incorporated with the soil at its highest fertilizing value; that the liquids (if he has a tight gutter) will be saved, and can only be saved in this way.

What a fearful flood of waste of fertility and loss of money comes to the host of farmers who will not read and think.—Hoard's Dairymen.

Corn In High Altitudes.

Much has been said by our Eastern friends for a number of years about the impossibility of the arid sections and particularly about corn growing in the higher altitudes. They say it takes warm nights to make corn grow, and as everybody who knows anything about the higher altitudes realizes, the nights there are always cooler than in other sections nearer sea level. We must then admit, if warm nights are an absolute necessity for the growing

of corn, that Western Nebraska and Kansas and Eastern Colorado will not grow corn.

Theory is one thing. Practical demonstrations are quite another thing. When you come to soil culture in the growing of crops, theory says corn cannot be successfully grown above an altitude of 3,000 feet. Practical demonstrations say that forty bushels of good corn per acre have been grown at an altitude of 6,800 feet and this in the face of the fact that in that great corn State, Illinois, where land is worth from \$100 to \$250 per acre and where the nights in midsummer are frequently so hot that sleep is impossible for either man or mosquitoes, the highest average yield has never been in any one year more than forty-one bushels.

While there are plenty of instances along the western border of Kansas and in Eastern Colorado where corn has yielded from thirty-five to forty-five bushels per acre within the past four years, yet the limit of possibility in corn growing in these high altitudes has by no means been reached. There are many branches of science not yet comprehended. In short, but very little thorough experimentation has ever been done in connection with this branch of farming in the West. No one has yet attempted to raise corn in high altitudes on summer tilled lands and only the more common methods of fitting the soil followed by a careful culture of the crop have as yet been resorted to. Only recently have we become convinced that seed corn direct from lower altitudes or from sections where the climatic conditions are different cannot produce as good crops as the same seed after it has become acclimated.

WHERE HUMIDITY STEPS IN.

Look at your agricultural papers from Iowa and Illinois and note the great stress put upon the breeding and selection of seed corn and the wonderful results mentioned that have already been obtained thereby.

Have these scientific principles been taken advantage of with the same degree of care as that given to cultivation? By no means. Have our Eastern friends recognized the fact that the atmosphere of these higher and more arid sections is very much more dry than in Iowa and Illinois and that because of this low humidity the evaporation from the leaf of the plant is as great, while the temperature is several degrees lower than in the above States? In other words, do they know that during midday, when the temperature may be practically the same in both sections, the evaporation from the leaf of the Western plant will be much the greater?

When we realize that the greater the evaporation from the leaf the greater the growth of the plant then we must see that the disadvantages of the cooler night are very largely overcome by decreased humidity of atmosphere. Permit me to suggest in this connection that there are already strong indications that the quality of corn and other cereals grown in the higher altitudes is as a rule very much better when fully matured than of those grown in lower altitudes.

I most earnestly urge the friends of the Campbell system to begin this year and give corn growing a thorough and fair test in the higher altitudes. First of all, carefully summer-till a piece of ground of the size you desire to plant to corn. Be ready the next season with as good seed as may be obtained near by, using the earlier dent varieties. Then proceed from the first crop and select the earliest and best ears for seed for the next crop and so continue until you have fully proven the merits of summer culture, seed selection, acclimation, and our drier climate.

While you can not plant your corn as early in the higher altitudes of Colorado, Kansas or Nebraska as in the Central States, you can usually begin the cultivation earlier and thereby get your soil in better condition. If you have been careful to carry some moisture through the winter in the soil this early cultivation and careful fitting will make certain a quicker germination and a rapid early growth. One of the early important steps in corn growing is to double disc the surface as soon as conditions will permit. Then follow with the after tillage that will retain the moisture and admit of a free circulation. The latter assists very materially in warming the soil and in increasing the available plant elements.

While good results may be had by carefully fitting the soil this spring, far better results may be obtained by summer tilling one season prior to cropping. In short, the latter plan, with acclimated seeds and with the soil

properly cultivated, practically guarantees a good crop.—H. W. Campbell in the Scientific Farmer.

Here and There on the Farm.

Moist weather.

Very few oats planted.

A fine spring for seeding tame grass.

Some men haul the manure which is full of grass-seeds to thin places on the pastures or meadows with good success. In this way they kill two birds with one stone.

Take off your hat to the old sow, but don't give her too much corn at farrowing time. Don't be afraid to slop her, but commence a month before she farrows.

Many farmers are now looking for seed-corn, but most of us would be better off with some about one-third bad. Don't get the corn too thick.

Poultry pays. Select one kind and have good ones.

Do you know that cheap hen-houses are as good as any. Build 8x10 feet, 7½ foot front, 4½ foot back, 10 foot board roof, 2x4 around top and bottom. Have door and window. Strip the cracks and line with tar paper. "Too small," did you say? Build as many as you like. There is no law against it.

Hasten the parcels post. "Ask and ye shall receive." While we wait, let us fix the roads.

Natural stone should be used wherever possible in preference to wood and tin.

CHAS. WINANS.

Jefferson County.

One Way to Make a Living.

The chief industry of Bethlehem of Judea is that of the mother-of-pearl workers. The shells are brought from the Red Sea, and in the hands of native artisans are polished and carved, the larger into elaborate designs; the smaller are cut up for rosaries and crosses. The work is all done by hand, and the methods are amazingly primitive to a spectator from the home of steam and electric power. But the results are extraordinary. The largest shell we saw was carved in scenes from the birth of Christ, the Agony in the Garden and the Crucifixion, and had the general effect of delicate frostwork. Under the magnifying glass every detail was seen to be perfect in outline and in finish. It was executed to order for a wealthy American, and was to cost \$160. About 150 persons make a living by this industry, which is 500 years old. In the shops the workmen sit upon the floor, their benches in front of them; the air is full of whitish dust, and the light, admitted by the single window and the open door, so dim that the exquisite tracery of the wrought shells is a mystery even before the visitor notes how few, simple and crude are the instruments employed.—Lippincott's.

Pertinent.

A Jew who had been using a push cart to convey his merchandise through the district where he was accustomed to sell his wares finally became sufficiently prosperous to warrant his buying an old horse and wagon.

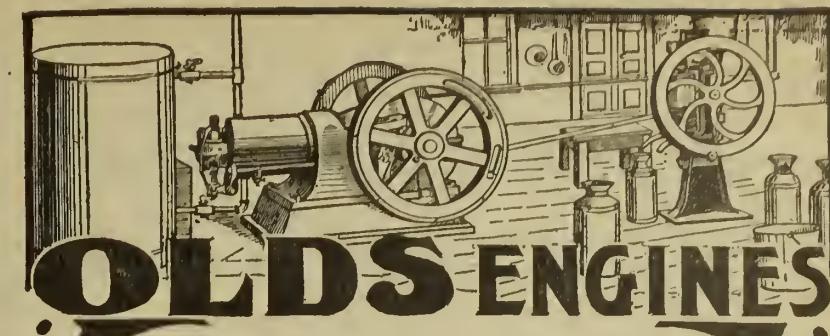
Having been too much absorbed in the prosecution of his business to pay much attention to other matters, he was profoundly ignorant of the terms used by the average driver in persuading his horse to move.

Therefore, when his rig was hitched up for the first time, and he was seated in his wagon with the reins in his hand, he patiently waited a while, expecting the horse to understand his particular part of the business. But the horse, being satisfied with the situation, did not move. Desirous of proceeding on his way, the Jew, after a period of silence, addressed the horse thus:

"Well, commence."

Indian Creek Grange, northern Shawnee County, will hold an open session on Tuesday evening, April 17, at Indian Creek schoolhouse. The program includes a debate on the question, "Resolved that United States Senators should be elected by direct vote of the people." The affirmative will be upheld by A. E. Dickenson and W. L. Reed; the negative by A. L. Brooks and J. M. Pollock. The new piano just purchased by the grange will be dedicated at this meeting. "What can be done to prevent the ravages of injurious insects," will be discussed by J. F. Clegg. This will be followed by music by Glen Pollock and a recitation by Mrs. Reed. This program deserves and will doubtless draw a full house.

Saying and doing are two things.—Henry.



OLDS ENGINES

There is no gas engine as simple as an Olds—compare it with others and this statement is proved. The repairs cost practically nothing. Every adjustment is very simple to make. Exact duplicate of any part can be furnished at once, perfectly machined and ready to put on. This is important in case of accident.

The Most Economical Engine

For running cream separator sawing wood, pumping, feed grinding, churning, and all farm work. Our reference—The User—The Man with an Olds. The reason why is interestingly told in our catalog mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalogue showing Type A (2-8 h. p.), Type G (8-50 h. p.), Types K and N (12-120 h. p. used with our Gas Producer it will reduce fuel cost 75 per cent.)

Celebrated Picture Free

For 4c in stamps to pay cost of mailing we will also send you Rosa Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16 x 20 beautifully colored, suitable for framing.

OLDS GAS POWER WORKS, Lansing, Mich.
(formerly OLDS GASOLINE ENGINE WORKS)

20 Chestnut Street

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year, and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

The American Boy for April will certainly please the boys, with its 101 pictures illustrating stories and leading articles of absorbing interest to the young. Boys who love animals will follow with eager delight "Shaggycoat," the biography of a beaver, by Clarence Hawks, the blind naturalist, "Shad Fishermen Casting Their Big Nets," and "Bird Migrations," by Professor Thomas. Games and sports are represented by a baseball story, it being number six of "Stories Out of the Editor's Life." Under the heading of athletics comes "My Tour of the Antipodes," part 1 of the story of Arthur Duffey's sprinting contests in Australia as told by himself. Of short stories there are "A Brave Korean," "Wolves at the Door," "The Biggest Fool at Last," and "The Truth About the Cowboy." Other titles are "Working Your Way," "Some Boys' Mistakes," "William R. Harper," "Among the Boys," "About Marbles," "Harry Castlemon," "The True History of Captain Kidd," Uncle Sam's Weather Map," "Mexican Boy Cargadores," "Sliding to Bases," "Boyhood of Great Americans," "Young Prince Joachim," "The Boys' Garden," "The Care of the Teeth," "Stamps, Coins, and Curios," "The Boy Photographer," "Experimental Lessons in Electricity," "The Wizard of Menlo," "How to Make a Sand Wheel," "Chemistry for Boys," and nearly fifty puzzles, tricks, problems, and contests that will keep the boys busy through the month. This number of The American Boy will interest every member of the family. Subscription price \$1.00 a year. The Sprague Publishing Co., Detroit, Mich.

Some Hen Figures.

Anyone with a liking for statistics may get some glorious facts and figures out of Uncle Sam's annual report on farming operations. It gives a first-class idea of just what we are doing in the way of feeding ourselves—and the rest of the world. No one has a just conception of the immensity of American farm products until he reads such a report. Take the poultry industry; annual production about 43,000,000 crates, or 1,472,042,730 dozens, or 17,664,524,760 individual and separate eggs, worth approximately \$130,000,000. These figures are amazing, yet in spite of this enormous production, it is still a fact that eggs are constantly advancing in price. The hen man needs to wake up to this fact if he aims at the highest possibilities in his business; for until this increasing demand is met and passed, prices are bound to rule higher. This being true, it is manifestly wise to take any and every course that will help production.

No better thing can possibly be done to increase laying than giving a healthy tonic in regular daily doses. All hens, and young chicks as well, need just this help in order to produce the most, or make satisfactory growth. Nothing better for the purpose can be found than Dr. Hess' Poultry Pan-a-ce-a. Thousands of successful poultrymen from all parts of the country testify to the wonderful value of this tonic. Dr. Hess (M. D., D. V. S.), has for years studied every possible condition which may exist in poultry culture, and has given the world his Poultry Pan-a-ce-a as a result. For those who do not know about this tonic let me say, it does not force egg-production by exciting or stimulating the fowl unnaturally. Instead, it makes digestion in the hen an easy and natural process,

so that every grain or spoonful of mash eaten either makes egg or flesh as Nature intended, and in the largest possible amount.

Those who use Dr. Hess Poultry Pan-a-ce-a tell us that it does positively cure and prevent disease. No flock can be sickly where it is used, because it makes the red blood which Nature requires for health, and also the necessary nitrates to carry off poisonous matter from the hen's system. By the use of this wonderful tonic, chicks are matured much earlier than would otherwise be the case; and pullets come into laying when eggs are highest and continue profitable the entire season. The cost of Poultry Pan-a-ce-a is a mere trifle compared with the great result it brings about. One cent's worth will feed 30 hens a day. Dr. Hess and Clark, of Ashland, Ohio, who prepare it, back Poultry Pan-a-ce-a with a written guarantee, so there is no risk in trying it. It is abundantly proved that if you use it as directed and occasionally sprinkle hens, roosters, and nests with Instant Louse Killer, your flock will be free from disease and uniformly profitable.

A New Labor Saver.

The Coffeyville Implement Co., Coffeyville, Kans., has placed every farmer, gardener, and florist under obligation by placing on the market a small hand disk cultivator. In these days, when efficient help is so hard to secure, any new labor-saving device will be welcomed. This little implement is equipped with three disks on each side that can be set at any angle and so adjusted as to throw the dirt to or from the plants. Both sides of the row are cultivated at once. This machine is a good weed-killer, and thoroughly cultivates the soil. It is cheap and ought to be in the hands of every man who has a garden and every woman who raises flowers. Write for a descriptive circular. You will buy one of these implements.

New Process Manufacturing Company.

At Lincoln, Kans., is located the New Process Manufacturing Co., which has some remarkable bargains to offer to our readers. You will note these bargains in their advertisement on page 413. Think of it! A complete set of chinaware for only \$1.80 and up. Twenty-six pieces of good plated table cutlery for only \$2.50. There are others. Write them for a catalogue and see for yourself. This company is reliable and will do what they promise. It only costs a postal card to get their catalogue.

A Home For Half the Money

In the Pacific Northwest.
A handsomely illustrated
88-page book.

OREGON WASHINGTON IDAHO AND THEIR RESOURCES

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig,

ROOM 212 WORCESTER BLDG.,

PORLAND, OREGON.

Horticulture

"Disastrous Grape-Vine Diseases and a Remedy."

The American Steel and Wire Co. has just issued a little booklet under the above title. For the benefit that may yet be derived this spring and for information of effective treatment to be applied in the fall, we reproduce a considerable portion of the booklet. Those who desire a free copy of the booklet should address the above company at Chicago, mentioning THE KANSAS FARMER. Following are excerpts:

Chlorosis is a disease itself or the evidence of disease. The distinctive signs of chlorosis in grape-vines and other plants consist in the stoppage of growth, twigs remaining thin, the leaves turning yellow, and the plant becoming barren.

Gris in 1849 showed that chlorosis is due to lack of iron. In 1869 Sachs called attention to the necessity for iron in healthy plant growth.

The disease has been traced to too rapid growth; poorly aerated soil, excess of lime in the soil. There remains obscure causes for the disease.

Sulfate of iron is in most cases a sure cure for the disease, and the consumption of this material in Europe has reached enormous quantities.

Rassiguier discovered a simple and practical method of combating the disease, which may be best given in his own words:

"The treatment with sulfate of iron, as an antidote to chlorosis, which I invented in 1891 and tried on my own property, has furnished such results that the method has spread and experience has taught its value to both scientists and practical wine-growers.

"For the benefit of those who are still unacquainted with the details of the matter, I will briefly review the conditions to be followed as to the time, method of operating, and quantity of dressing to apply; and recount the influence of a single annual washing on chlorosis, anthracnose, and "short node" on vines, fruit-trees, and roses.

"To produce the full effect, washing should be performed in autumn, the vines most afflicted with chlorosis being treated first, as soon as the first leaves begin to fall; in fact, I think that such as are very much stunted should be treated before any of the leaves come off. Both are washed immediately after each stock has been pruned.

"All the wounds made in pruning should, without exception, be drenched with the iron solution and, in order to ensure the curing of the disease, the drenching should extend over the whole surface of the trimmed shoots (not excepting the buds, these being sufficiently protected by their downy envelope), the branches, and even the stem, as will be explained below.

"There is no need to be afraid of a more or less deep coloration of the trimmed shoots, and if any of these—insufficiently ripened, and therefore liable to perish—should succumb to the washing process, their place will shortly afterwards be found taken by vigorous buds—beside or below the dead shoots—which will bear fruit the next year. All vines, well or diseased, may be washed with advantage, as the treatment strengthens growth.

"If postponed until the cold weather sets in, the washing will have little effect, and spring washing is less efficacious against chlorosis than autumn washing.

"An active laborer with a wooden pail and a brush or, better still, a woolen rag tied up in the shape of a brush, can wash after three pruners. The solution should be a saturated one, i. e. containing 40 to 45 per cent of sulfate of iron and may be prepared in a very simple manner by placing 80 to 90 lbs. of sulfate of iron in a wicker basket or jute bag slung on a stick and suspending in a vessel large enough to hold 200 gallons of water without overflowing when the basket is immersed. After leaving over night the sulfate will be dissolved and the liquor ready for use the next day.

"Generally the results of the treatment are remarkably beneficial, and in many places a complete cure is effected the first year. However, some soils are less favorable to viticulture and require the treatment to be repeated. Chlorosis has also been cured in fruit and rose trees by washing the pruned surfaces with the same solution.

"Moreover, when the dressing is applied over the entire surface of the stock it is capable of destroying the stems of oidium, anthracnose, mildew,

and insects lodged in the interstices of narrow lands, bringing the dead furrows eight feet apart, except every fifth row which should be ten feet apart. This will allow driving through with a team for the purpose of covering the vineyard in winter and also for hauling out the fruit-crop.

"Three years' consecutive treatment of my own vines cured the stocks suffering from short node, i. e. those where the nodes on the stocky branches were only a few centimetres apart. These formerly unproductive stocks now yield a large crop, and the internodes are of ordinary length.

"First year's grafts may be treated with a 20 to 30 per cent solution, the full dose being repeated the third or fourth year.

"Thus all the foregoing maladies are curable by a single annual operation.

"I recommend the pruner to cut through the middle of the bud just above the one destined to bear fruit, so as to leave intact the protecting septum existing at this point, and which, when cauterized at the surface by the action of the sulfate of iron, preserves the adjacent internode from the effects of frost, insects, or wet, which might otherwise penetrate the pith; this internode remaining healthy, the fruit bud will be rendered more vigorous."

ANTHACNOSE OR BIRD'S EYE ROT OF THE GRAPE.

This fungus disease and its cure is so well described by Prof. O. M. Morris in Bulletin No. 64 (Jan., 1905), of the Oklahoma Agricultural Experiment Station, that we quote the article entire:

"This disease is scattered over a large portion of the territory and is doing a great deal of damage. It is one of the worst of plant diseases, as it attacks the fruit and all green portions of the plant and is very difficult to handle. Most of the methods of treatment prove unsatisfactory. The first appearance of this trouble should be vigorously met and all possible care taken to prevent its spread.

"This disease may appear at any time during the growing season. It commonly appears on the shoots soon after growth starts in the spring. Its presence on the shoots is first indicated by the darkening and sinking of the bark in small oval or oblong spots extending lengthwise of the shoots. If the disease is abundant the shoots soon have a speckled appearance. These spots usually enlarge, the greater portion remaining black with a more or less distinct line of purple around the edge. After a time the center turns gray and forms a scab; this is the fruiting portion of the disease. Limbs badly affected are severely checked in growth or killed. The leaves are attacked and on the stem and vines show the same marks as on the shoots, but on the blade of the leaf the spots turn brown. The stems of the clusters are also attacked, and where the spots girdle a stem the fruit below the girdle does not ripen but remains green and withers.

"The disease usually appears on the berries when they are about half grown. The diseased portion is brown with the characteristic red or purple margin and round in outline. The discolored part is sunken and later turns to a lighter or gray color, which is caused by the fruiting portion of the fungus rupturing the skin and forming a scab. Some varieties are more susceptible to the disease than others. Among those most susceptible to its attacks are Goethe, Agawam, Vergennes, and Diamond.

Treatment should begin early, before the buds open in the spring. The following solution is very good to apply as a wash before the growth starts in the spring:

Sulfate of iron, 70 pounds; sulfuric acid, 1 pint; warm water, 16 gallons.

The acid should be poured over the sulfate of iron crystals and then the water added. This, if well applied, will kill all of the spores that have lodged in the vines over winter. When this solution is used the vines turn black, and any part of the vine that has not turned black within a day or two after the first application should be washed again. Bordeaux mixture is of value in holding the disease in check on the growing vines."

Growing of the Grape.

E. F. STEPHENS, CRETE, NEBR.

The grape is the oldest of domesticated fruits. Doubtless, wine was made from it even before it was brought into cultivation. We read that its product was in use in Noah's time. The fruit is so easily grown that we feel sure the grape would find a place on every home if people really knew how easily and surely it can be grown. Doubtless, many people feel that its cultivation requires more than ordinary skill. Many neglect winter protection.

PLANTING.

Our habit is to plow the ground in

narrow lands, bringing the dead furrows eight feet apart, except every fifth row which should be ten feet apart. This will allow driving through with a team for the purpose of covering the vineyard in winter and also for hauling out the fruit-crop.

We subsoil these dead furrows to the utmost depth possible, using four to six horses. We then follow with disc and harrow. This helps to conserve moisture and allows the vines to root deeply. If the soil is not very fertile, we fertilize heavily with fine, old manure. We also use whatever amount of ashes we can secure to increase the amount of potash available.

Having prepared the ground so thoroughly with team-work, we are not required to dig large holes for the roots by hand. We aim, however, to plant them four inches deeper than they grew in the nursery.

If it is convenient to go to the slaughter house and secure wagon loads of bones we use those, since bones by their slow decomposition furnish one of the best and most lasting fertilizers for the vineyard.

In planting use strong, two-year-old vines. Cut these back to three or four buds. Allow two or three canes to grow the first season.

CULTIVATION.

Cultivation should be weekly from planting time until August 1, after which allow the vines to ripen. Early in November all vines should be cut back nearly to the ground, leaving enough buds to grow three or four vigorous canes the next season. Over each plant place a fork full of straw; cover this with two or three spadefuls of earth to keep the straw from blowing away.

If the work the first season has been properly done, we should have vigorous, well-established vines that will the second season make a growth of five to ten feet. Cultivate the second season similarly to the first.

TRELLIS.

Use strong, heavy posts at the end of the rows. We are using posts cut from Osage hedges planted thirty years ago. It is important that the end posts should be very heavy and should be strongly braced, otherwise, during some violent storm, the posts may break and drop the load of fruit to the ground. The remaining posts may be lighter. We prefer to use posts eight feet in height set thirty inches in the ground. It is admissible to use No. 12 wire which is lighter than fence-wire. Continue to trim the vineyard early in November of each year. The vines will remain dormant later in the spring if the covering is removed and vines tied to the trellis about the first of April.

SELECTION OF VARIETIES.

Our market is in Central and Western Nebraska. In this district the trade prefers blue grapes. Buyers are also pleased with large bunches. For such markets the Moore's Early has been found profitable and satisfactory. This variety is not as productive as the Worden or Concord and will not yield as many pounds or baskets to the acre. It, however, ripens comparatively early in the season and has usually brought us the best price per basket.

We follow this variety with the Worden, a seedling of the Concord. The Worden is of excellent quality, but has the fault of sometimes ripening unevenly, and in shipping a considerable distance the berries often fall from the stem. Its quality is better than the Concord. The Concord is the most productive of all varieties so far tested and is satisfactory in color and quality.

Those who desire a white grape will be pleased with the Empire State and Niagara. Those who desire a white wine-grape may plant the Eivira.

Those who desire a red grape of very superior quality may plant the Brighton. Care should be taken to pollinate this variety by planting along side some other blooming at the same time.

At our last State Fair the Woodruff Red attracted attention as a very promising variety. Campbell's Early and Green Mountain are desirable early varieties worthy of trial.

MARKETING.

Most grapes are marketed in the so-called eight-pound basket, holding, when well packed, seven pounds. The best results are secured by developing (1) the local market and (2) distributing the crop to other towns, not otherwise over supplied, within reach. Grapes should be handled with extreme care; baskets should be packed full, lids pressed on and securely wired. We find in our trade that the Nebraska market does not care to pay a high price for such fancy varieties.

Don't Get Wet!

TOWER'S SLICKERS
will keep you dry as
nothing else will, because
they are the product of
the best materials and
seventy years' experi-
ence in manufacturing.

A. J. TOWER CO.
Boston, U.S.A.
TOWER CANADIAN CO., Ltd.
Toronto, Can.

881

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK TREES best by Test—75 YEARS. WE PAY CASH
WANT MORE SALESMEN
Stark Nursery, Louisiana, Mo.; Huntsville, Ala.

SEEDS That will Grow **PLANTS**
That will Bloom
None better, even at the high prices. Special bargains. SEEDS, 10 pkts.
Annual Flowers, 10c or 5 pkts. Vegetables, 10c. PLANTS, 6 Roses, 25c;
Geraniums, 25c; 6 Begonias, 25c; 4 Polyanthus, 25c. My catalog price will
surprise you. Catalog and packet Royal Giant Pansies free.
A. C. ANDERSON, Columbus, Nebraska.

SEED CORN
Boone County White, Farmers' Interest,
Reid's Yellow Dent, Improved Leaming and
Riley's Favorite, best pedigreed and tested
seed, grown on my own farms, \$1.50 per bu.
Sacks free. Delivered on car for any station
in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois
Iowa Produces the Best

SEED CORN
and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. **W. W. VANSANT & SONS,**
Box 54, Farragut, Iowa.

WRAGG TREES
WE PAY FREIGHT.
SEND for our handsome catalog
of Trees, Shrubs, Roses, Ever-
greens, Etc.
We send Direct.
Our prices are lowest.
M. J. WRAGG NURSERY COMPANY,
347 Good Block, DES MOINES, IOWA.

The World's Fair Prize Winning Corn
Just WON FIRST PREMIUM at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tells how to raise Corn every year FREE. **John D. Ziller, Hlawathia, Kansas.**
HE RAISES CORN.

World's Premium Seed Corn,
HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

A Proposal

To give advice if needed. Lay out your plans and start your team, and if anywhere along the route, between planning and cropping, you need help, just draw on our accumulated capital of 50 years' experience. At the start off you will need good seed. Catalogue free.

J. J. H. GREGORY & SON,
Marblehead, Mass.

The Best Fruit Paper

is The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Everyone who has a few fruit trees or a garden, should read

THE FRUIT-GROWER
ST. JOSEPH, MISSOURI
Every issue is handsomely illustrated and from 32 to 64 pages a month are filled with interesting matter pertaining to fruit-growing and gardening. The first four issues of 1906 will be handsomely bound and devoted to the following subjects:—January, The Horticultural Societies; February, Spraying; March, Gardening; April, Small Fruits. Any one of these numbers will be worth a dollar to you. We publish the "Brother Jonathan Series" of fruit books. Send your name and address and we will tell you how to secure these books free.

Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

Brighton, Delaware, and Empire State. The market does not seem disposed to pay for extra quality. The average merchant who can purchase Concord for sixteen to twenty cents per basket will not handle Brighton or Delaware and other choice varieties at twenty-five cents per basket. Profits are determined by quantity combined with simple fair quality. The demand for this fruit is very rapidly extending. The market is growing faster than the production.

The cost of establishing a vineyard, including vines, planting, cultivation, posts, wire, and protection is \$80 per acre. The annual yield of our vineyard is \$100 to \$136 per acre. A vineyard located where it could have a local market sufficient to absorb its product should secure larger returns.

"The Fruit-Grower's Wife and Babies and the Automobile."

PAPER BY GEORGE WEST MAFFET BEFORE THE DOUGLAS COUNTY HORTICULTURAL SOCIETY, MARCH 17, 1906.

Of all the modern improvements forcing themselves upon the country dweller most persistently, the automobile takes precedence in that it is a constant menace to the wives and babies traveling with horses upon the public highways. This thing of railroad trains leaving their tracks and racing indiscriminately here, there, and everywhere over the earth utterly oblivious to the rights of others is not to be tolerated beyond reasonable limits.

The highest court in the land has ruled that the automobile has come to stay and that the horse must learn to become accustomed to it. There is a law that antedates this and goes back to the time when primitive man fought for privacy with a shin-bone at his cave entrance; and that is "self-preservation is the first law of nature." Then there is the modern law which holds that one man may not damage another without making good the damage.

The real danger comes from the fact that the horse has not time to make up his mind concerning the approaching auto; the thing is on him like a flash and there is nothing to do but wheel around and run or dash sideways across the gutter and through the hedge or wire-fence. If the autoist would impress this upon his own mind and take the time and care to reassure a timid horse, a few lessons would suffice and soon all the horses would become educated and motor travel be made more pleasant. How the hearts of the horse owners of Lawrence do warm toward Mr. Rutter for his care with the pioneer auto; when needful he would slow down to a scarcely perceptible motion and in a very short time the horses would take no notice of the machine.

The officers of the law in the East have adopted two methods of controlling speed—a station on the boulevard snaps a stop-watch at a second station down the road—if the passing auto exceeds the speed limit, a distant officer is signalled and he heads off and arrests the approaching speeders. The second method is more crude but just as effective—the officer shoots a bullet through the rubber tire; it has been discovered that a bullet can overtake an automobile—about the only thing that can. This latter method rather appeals to the farmer and is no more dangerous to the autoists than is the machine to the driver of any horse.

Another method that can be tried

U.M.C.
METALLIC
CARTRIDGES

For Remington Rifles
For Winchester Rifles
For Savage Rifles
For Marlin Rifles
For Stevens Rifles
For All Rifles
U.M.C. cartridges are universally preferred by sportsmen who wish to get their full money's worth. Your dealer sells them. Free Catalogue.

U. M. C. cartridges are guaranteed, also standard arms when U. M. C. cartridges are used as specified on labels.

THE UNION METALLIC
CARTRIDGE COMPANY
BRIDGEPORT, CONNECTICUT
Agency: 313 Broadway, New York

upon the utterly reckless is for each driver of a farm wagon in infested districts to carry upon the seat beside him a short club about thirty inches long and hurl it end foremost into the spinning wheels. If successfully thrown, the auto man who was in such a hurry will find ample time to talk of the weather, and can discuss matters of moment with the driver of the farm team and can make arrangements to get his machine back to town.

But a method, entirely within the law and in the long run effective, is to sue in the courts for the full value of every horse made unsafe by the owner's machine; sue for every injury done to vehicles; sue for any harm which befalls the wife and babies and ask a good round sum in addition for exemplary damages—a jury will give it to you. In this way the motorists will soon find it convenient to be decent and reasonable. For the reckless adopt reckless measures or try a writ of injunction to forever bar them from running a machine.

An automobile running six miles an hour is comparatively harmless. Fifteen miles an hour should be considered high speed. Twenty miles an hour is too high for any motor of whatever nature, except when running on steel rails. An automobile running at fifty miles an hour upon a country road should set the telephones ringing for twenty miles and should be met with a shower of rifle bullets wherever it goes.

After all, until public opinion and needed legislation shall either reduce the speed or drive the automobile from the public highways entirely, the logic of the occasion is for the machine owners to do all that can be done to reassure the timid horses. Stop promptly when shown the uplifted hand, signal by horn at road intersections, stop and help in case of accident and offer sympathy and regrets—and more important than all keep an eye far in the distance for the farmer's wife and babies, and dismount and go forward to their assistance if it is needed.

[THE KANSAS FARMER] realizes that the provocation is great, but it can not print this paper without reminding the reader that Mr. Maffet is a law-abiding citizen not given to undue use of rifle, shotgun, or club, and not likely to advise his friends to seek to cure any evil by unlawful means. Let every farmer and fruit-grower see to it that the next legislature is pledged to enact an efficient law for the regulation of automobilists.—Editor.]

The 'Phone and the Farmer.

The following extract, from a new booklet issued by the Electric Appliance Company of Chicago, clearly sets forth the many advantages of the 'phone on the farm. It strongly contrasts the old way and the new way of farming, and shows the immense progress made in agricultural lines the past few years.

"Twenty years ago it was considered nothing uncommon to rise hurriedly in the middle of a perhaps cold, stormy night and sally forth for medical assistance, or render some neighbor in distress a needed service.

To-day it is possible for the farmer to answer all demands of a neighborly or social character, transact business at a saving of time and trouble, extend and enlarge his acquaintance, enter into the spirit and activity of town life, and direct his affairs on an absolute surety of success by having a reliable 'phone in the home.

Not a day passes but some trip will be saved; not a day passes but some business transaction will be completed that will be worth the yearly cost of maintaining a good 'phone.

The rural mail service has produced some very radical changes in the social and business life of farmers in general, but the farm 'phone will eventually produce even greater changes by bringing more closely together the progressive people of town and country, whose interests must always be identical—the welfare of the one depending upon the progress and advancement of the other.

Without a 'phone on the farm every errand, little or big, demands the personal attention of some member of the farmer's family, with perhaps a team to carry him, at a loss of time and help, of both. This, too, when work is pressing and every moment means dollars.

On a farm where decided action and quick judgment are needed every hour of the day, the Iaco Farm Telephone is as much of a necessity as any other labor-saving implement on the place. In these days of competition in sales, in being first on the market, the farmer who has not a good, reliable 'phone is, to all intents and purposes, just as well isolated and apart from the actual business of a community as ever Robinson Crusoe was on the desert island."

We can heartily recommend this little book to all who are interested in building a telephone line of any description as it gives a great deal of valuable information about line building, cost of building, etc. A mention of this paper will secure the book free postage paid.

When writing our advertisers please mention this paper.

Williams' Shaving Soap

The man who accepts a substitute for Williams' Shaving Soap insults his common-sense, his pocket book and his face.

Discerning men want Williams' Shaving Soap. Wise men not only want but get it.

Send 4c. in stamps for a Williams' Shaving Stick (Trial Size.) (Enough for 50 shaves.)

Williams' Barbers' Bar, Yankee, Mug, Quick & Easy Shaving Soaps and Williams' Shaving Sticks.—Sold everywhere. Address,

THE J. B. WILLIAMS COMPANY,
Dept. A, Glastonbury, Conn.

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON

Pure Kansas Grown Seed, Crop of 1905. Also
Cane and Millet. Macaroni Wheat and other
Field Seeds in carload lots or less. Write for prices
GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

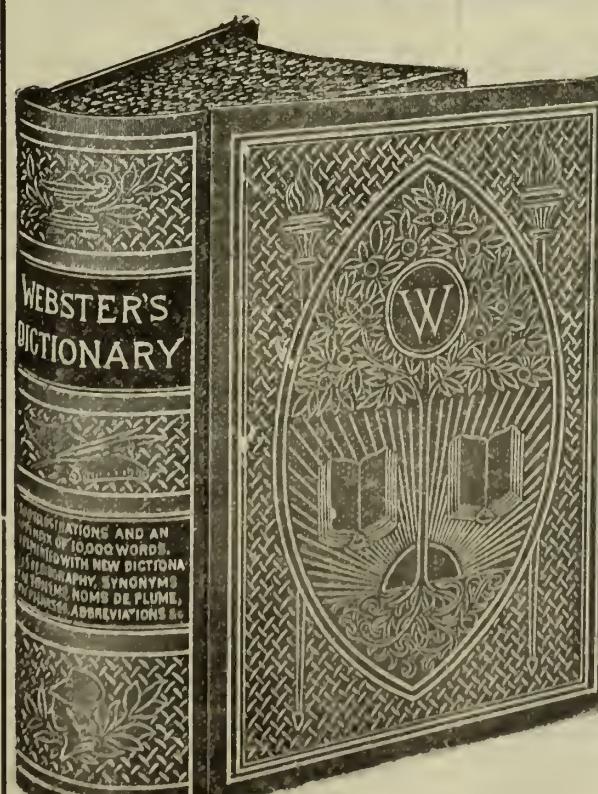
Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.
Hart Pioneer Stock is pure bred and produces heavy crops.
Value received for every dollar sent us. No Agent's Commission.
WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.
HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

OUR GREAT DICTIONARY OFFER.



New Census Edition

Full Sheep Binding

Thumb Indexed

Regular Price, \$9.00

We are now enabled to offer our readers this Great Work and the Kansas Farmer for one year for only

\$2.75

Send Cash or Money Order to

Kansas Farmer Co., Topeka, Kans.

POULTRY BREEDERS' DIRECTORY.

WHITE PLYMOUTH ROCKS exclusively. Eggs \$2 per 15; \$3 per 30. All orders given prompt attention. R. C. Carson, Route 7, Winfield, Kans.

S. C. R. LEGHORN EGGS—From first cockerel at the State show. \$2.50 per 15. Other pens \$1 per 15. Mrs. Slicer Sel, Meriden, Kans.

R. C. B. LEGHORN EGGS FOR SALE. Stock from best laying strains \$1 for 15; \$5 for 100, best selected and fresh eggs. Mrs. Pertha Evans, Route 4, Rox 32, Lyons, Kans.

WHITE WYANDOTTES—the lay all winter kind. Red to high score, large egg record cockerels. Dusky strain. Eggs 5 cents each. \$4 per 100. J. L. Moore* Eureka, Kans.

RIODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

FOR SALE—Silver Laced Wyandotte eggs, farm raised, \$1 per 15; \$4 per 100. Cumberland raspberry plants, \$6 per 1000. Frank Rice, Wathena, Kans.

WHITE FACE BLACK SPANISH—I have for sale some fine males, young or old for fancy breeders from \$2 to \$3 each, and utility birds for \$1 each. Eggs, \$1.25 per sitting. Mrs. Hattie Tyler, Fairview, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—Eggs, \$2 per 15; \$3 per 30. All orders given prompt attention. R. C. Capron, Route 7, Winfield, Kans.

RARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns. S. Spangled Hamburgs, S. C. Black Minoras. Prize-winners in every pen. Eggs, \$1 per 15. Vira Balley, Kinsley, Kans.

BLUE BIRDS—Parred to the skin, Hawkins' Ringlet strain. Eggs, \$1 per 15; \$5 per 100. Minnie K. Clark, Lyndon, Kans.

LIGHT BRAHMA EGGS from prize-winning birds, \$1.25 for 15; \$2 for 30; \$2.50 for 45; \$5 for 100. Carefully selected. N. Van Buskirk, Blue Mound, Kans.

EGGS FOR HATCHING from my flock of pure-bred B. P. Rocks. Pulletts scoring 93; flocks kept by males scoring from 90% to 92%. \$1.25 per 15—\$6 per 100. Incubator orders a specialty. Eggs carefully packed. Address Mrs. Chas. Ainsworth, Eu- reka, Kansas, Route 1.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Hettich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale: also a few cockerels. Bertha Gresham, Bucklin, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kans.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kans.

BARRLED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 98%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

PARTTRIDGE COCHINS—Toulouse Geese, pure-bred; farm raised. Eggs \$1 per 13 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Langshan eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Red to W. F. Cox, Clifton, Kansas. Eggs for sale at \$2 per 15.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

ROHDE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Kellerman, "Vineyard Farm," Mound City, Kans.

BARRLED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

BARRLED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 \$3.50. H. F. Brueggemann, Route 2, Herlin, Kans.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kans.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. Turkey eggs, \$3.00 per 15. J. C. Bostwick, Route 2, Hoyt, Kans.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Ruff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE PLYMOUTH ROCKS—12 years breeder of coldest birds. Eggs \$1.50 per 15. Member American White. P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRLED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Ks.

The Poultry Yard

Beware of Wet Foods for Chicks.

It is a mistake to suppose because a chick is small, that it needs to be fed mainly on soft feed. No other one thing causes so many deaths among chicks as wet corn-meal left where they can run into it with their dirty feet, and then leave a large part of it to ferment, which it is sure to do in the warm sunshine. The food for the chicks should be as nearly dry as it can be to feed conveniently, and corn-meal should never be given to small chicks except when it is mixed into a dry crumbly state. A very good feed for young chicks is a johnny cake made out of corn-meal, bran, ground oats, equal parts, a little leaf meal or dried blood and all mixed with skim-milk. But dry grains such as pinhead oatmeal, millet, cracked wheat or Kafir-corn and cracked rice can be fed to them from the start. The digestion of the young chick is naturally strong if not weakened by feeding exclusively on soft food. Some fine grit and charcoal should be placed where they can get it at will. In fact, some successful poultry-raisers claim that the first thing a young chick should have is grit. An excellent mixture for chicks from one day to six weeks old is four parts cracked oats, one of cracked wheat, two of rolled oats, one-half part of millet, one-half part broken rice, and two parts fine beef scraps. After six weeks old cracked corn can be added to their ration as well as Kafir-corn and whole wheat.

Poultry Pointers.

If one of the boys on the farm takes kindly to the care of poultry, encourage his ambitions by getting him some thoroughbred poultry, or, if you can not afford enough money to start him with poultry, give him enough money to buy a setting of thoroughbred eggs. Many a successful man owes his start in life to the ownership and management of something he "took a notion to" in his boyhood days.

Some people make a hobby of their chickens. Well, there is no higher mission of humanity than to induce men and women to ride some hobby that will make them forget the cares of business for a while each day. Let the hobby be chickens, ducks, turkeys, pigeons, or anything that will take them out into the fresh air and sunshine, away from the enervating atmosphere of four walls and a roof.

One of the real stumbling blocks in the way of successful poultry-raising is the failure to observe the practical method of improvement by selection. Where the best pulletts are carried off to market as soon as good prices are offered, and the inferior specimens retained for breeding, it is to be expected that the stock will deteriorate, and new blood is then an actual necessity every year. In this way there can be no permanent improvement in the flock. Keep the best you have for your own breeding stock.

If your chicks disappear, watch the cat, watch your neighbor's cat, watch all cats, and keep them off your premises if you have to plant a few of them. Cats do lots of mischief in the poultry-yard that is blamed on rats. Rats are bad enough, but a cat with an appetite for chickens will do more damage in a week than rats will in a month. Beware of the cat.

Training for the Show-Room and Notes About Exhibition Poultry.

No one feature of an exhibition fowl counts for so much as does the comb and other head points. What might be an otherwise very attractive head is frequently marred by an ill-shaped or crooked comb, or badly formed wattles or ear-lobes. These defects may often be improved. Here is where the experience counts. The working and manipulating of a crooked comb into a straight presentable one, the smoothing out of the wattles, or the flattening down of the ear-lobes becomes as easy to a well-trained manipulator as it does for the surgeon to work into shape any badly formed portion of the face of a child.

This may be done without being accused of faking. A little glycerin or vaseline taken between the fingers and rubbed against the badly-shaped comb may soften and work it into good form. If this is continued for a number of times a defective member may be straightened out and wattles may be improved in the same way. Never be tempted to make use of the knife or scissors to trim or cut in a way that may be apparent to an amateur when

he sees it. There are some slight surgical operations that may be performed in this way that are legitimate, but when it comes to cutting for the improvement of formation, it is seldom, if ever, a successful piece of work for the judge will soon detect it.

Fowls that have feathers on their shanks and feet may be very much improved for the exhibition hall by removing, at least sixty days prior to the exhibition, all the broken, badly-formed or colored feathers, provided they have grown long enough in the shanks and feet to have become hardened, so that the removing of them will not cause a blood flow from the shanks or toes. Old, hard, broken feathers may be removed sixty days prior to the exhibition with almost a certainty that new fresh feathers will have grown in by the time the date of the exhibition is at hand. For the heavy feathering of the large Cochins a little longer time is needed. For others the time mentioned is quite sufficient.

Nothing is better to add luster to the plumage than sunflower seed. We have known Cochins, Brahmans and Langshans to be completely fitted for the exhibition hall with whole corn and sunflower seed. This combination seems to produce long, heavy, fluffy plumage with a fine luster, and plenty of flesh and weight.

Get Rid of Vermin.

Now is the time to be looking after the vermin that through cold weather has more than likely been given the chance to get an excellent start. Even were dust-baths provided the hens through the winter, unless the dust is heated by the sun or in some other way, most hens will avoid it as they do cold water, not caring how full of vermin they get, as placed against the discomfort of that dust-bath. There may be poultry-plants free of vermin, but, if so, it has come about by the utmost diligence and frequent lookout as well as allowing no vermin-infested birds about the premises or new fowls until the newcomers have been thoroughly gone over with vermin-killers.

Sometimes it does seem a mystery where the vermin so suddenly spring from, even brooder chicks showing them. They travel, I am sure, like bed-bugs, on the hunt of desirable rations. The mites will kill the young chicks if they have become so plentiful as to leave the roosts on the hen's bodies, or to infest nest-boxes. Usually they prefer to stay on the roosts, but I have seen them black on hatching hens, therefore, the hen must have brought them. They are dark when in search of food, and red when filled. After feeding they hide away until again hungry, in the crevices of the nest-boxes.

On most farms the great per cent of mortality among young chicks is due to vermin, and this is why one must begin looking out for them in early spring, cutting off the enormous progeny they will bring forth as the warm weather comes on. Nest-boxes and coops, brooders and all fixtures from last year to be used for the new chicks must be thoroughly scalded and disinfected before this year's chicks go into them. The roosts and all parts of the poultry-houses should be scalded, whitewashed, and sprayed with kerosene or carbolic acid. The fowls must be dusted with vermin-killing powder if we want to save the chicks.

So often, when mites are plentiful on the hen or about the chicken-coops, you can not find them on the chicks and wonder why the little fellows droop and die so quickly. And yet, could you look at night and see the bloodsuckers cover the chicks, disappearing at daylight, you would know why the chicks died.

The large lice are the most formidable enemies of the small chicks. It is claimed that but one of these will kill a chick. I know that from two to four will do so, as they have a fashion of crawling under the throat and draining the blood from the large artery located there. If the weather be rainy, the vermin will increase because the fowls can not get to good dust.

In getting ready to set the hen, after seeing that not only the nest-box, but the floor and walls back of her are clean, I sprinkle either ashes, lime, tobacco-dust, or vermin-powder under the straw of the nest, and whether I find those large lice in the fluff above or below the vent or not, I take it for granted that somewhere they may be hiding from me ready to begin work when my back is turned on them, and give the hen an extra good dusting with the powder also. Once or twice I repeat this performance afterward, but not after she has been sitting twelve or fourteen days. If I find the large lice after this about her I wait until the

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHANS—Hens scoring 93 and upwards-headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BARRLED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, \$15 per 100. I have an orchard flock of 60 pullets matched with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. R. 4, Junction City, Kans.

BUFF PLYMOUTH ROCK EGGS for sitting, \$1.50 per 15. Jay S. Buck, Oskaloosa, Kansas.

BARRLED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, \$2 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

CHOICE B. P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. English geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minoras cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93 to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

BARRLED ROCKS EXCLUSIVELY—Left evel strain. Large, heavy-boned, fine, clear; Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Lawndale Poultry Yards, John D. Ziller, Hawawha, Kansas.

WHITE WYANDOTTE COCKERELS, (Stay White). \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show. O. C. Sechrist, Meriden, Kansas.

BUFF LEGHORNS S. C. Eggs 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Ks.

HIGH CLASS POULTRY Silver Wyandotte, White Plymouth Rock Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

LIGHT BRAHMAS More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver, Blue Mound, Kansas.

Eggs for Hatching M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

BUFF ROCK EGGS Here they are. Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Reputile County, Kans.

ROSE COMB BROWN LEGHORNS AT READ-ING, KAN. Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers. MRS. IDA STANDIFERD, "Up-To-Date" Farm.

PRIZE-WINNING S. C. BROWN LEGHORNS Exclusively. (Short's strain.) Farm stock eggs from pen scoring 196, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS. Mention KANSAS FARMER when writing.

S. L. Wyandottes Indian Runner ducks. Our Wyandottes have been line bred for 20 years and never fail in any company. Our yards are headed by Silver Prince, the 1st cock at the Kansas State Show, and three of his cockerels. Stock for sale. Eggs, \$2 per sitting. Incubator eggs, \$5 per hundred. Duck eggs, \$1.50 per sitting.

M. B. CALDWELL, Broughton, Kansas

BUFF LANGSHANS \$4.00 per 13 eggs.

White \$2 per 15. Black \$2-\$1 per 15 and \$5 per 100; Buff Leghorns; Orpingtons and Cochins, S. & D. C. B. Leghorns, White P. Rocks, S. L. and White Wyandottes, L. Brahmas, \$1.5

POULTRY BREEDERS' DIRECTORY.**Imported S. C. Black Minoras**

The world's greatest laying strain. Eggs \$1.50 per dozen; \$6 per 100. Send 5 cents for circular. Address George Kern, 817 Orange St., Leavenworth, Kans.

Eggs For Hatching

WHITE HOLLAND TURKEYS, MAMMOTH, PEKIN DUCKS AND BARRED PLYMOUTH ROCKS. \$1 per setting for any of the above, fresh eggs carefully packed and safe arrival guaranteed. A. F. Huise, Manhattan, Kans.

White Plymouth Rocks

Scoring 95 Scored by Rhodes
Eggs from selected pen, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Ida Meier, Route 2, Lincoln, Kansas.

 15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.
H. H. HINIKER, Box 90, Mankato, Minn.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas
Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. C. MILLER, Breeder.
Stock for sale. Fifteen eggs for \$2. Address
546 Missouri St., LAWRENCE, KANS.

Light Brahma Chickens

Choice pure bred cocksrels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

S. C. Buff Leghorns, S. C. Buff Orpingtons

Jumbo Squab Pigeons (Useful Pigeons)
Our catalog tells prices, prizes and quality. Send for it to-day. W. H. Maxwell, 1220 Quincy, Topeka, Ks.

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet; 2, 4, 5 cockerel. Young cockerels for sale. Eggs, \$1.50 to \$2.50 for 15, from high-scoring pens.

R. B. Steele, Sta. B, Topeka, Kans.

ACME CHAMPIONS

Bronze turkeys. Show keys. Show Champions, Topeka and St. Joseph, winning ten 1st, three 2nd, two 3rd prizes; only 7 birds entered. Barred Rocks, 1st, 3d hen, Topeka, 93%; 92% 2d cock 90%; 4th pen St. Joseph, 2d hen 92%; 3d cock 91%; own 2d cockerel, 93%. Eggs, \$3 per 15; \$5 per 30. M. B. Turkey eggs \$1 each. Cockerels for sale. Pullet breeders specialty. Mrs. W. B. Popham, R. F. D., Chillicothe, Mo.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR,
Glendale Park, Hutchinson, Kans.

Rose and Single Comb White Leghorns and White Wyandottes IN ALL THEIR PURITY

Unsurpassed in every respect for beauty, utility and winter layers. At State show the largest in the United States, just held at Topeka, Kans., 26 prizes were awarded me. Write for my catalogues, giving prices on stock and eggs.

W. S. YOUNG, McPherson, Kans.
When writing mention this paper.

INCUBATOR EGGS

From high grade White Rocks and White Wyandottes.

\$3.00 for 50, \$5.00 per 100
SEND FOR CIRCULAR.

W. L. BATES, Topeka, Kans.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants.

A. H. DUFF,

Larned, Kansas

At Topeka 1906

Our Buff P. Rocks won all shape and color prizes awarded. Our first prize pullet scored 94 (1 for injured eye). Our winning Holland, White Plymouth Rocks, and White Wyandottes, are the same quality. We have very fine S. C. B. Leghorns. Judge Heimlich cut our White Rock cock ½ of a point for color of entire bird. Eggs from pens we hatch \$2 per 15; \$8 per 100. Standard Poultry Yards, Abilene, Kans.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 280 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96%, and as good as can be found anywhere. Eggs only \$2 per 15; \$6 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B., Topeka, Kans.

chicks are all out, then give the hen an extra good greasing with lard. As the season advances one must get more and more careful in keeping the hens rid of vermin.

Of the large kind of vermin there are more than one kind. Some are blood-suckers, some are simply after the oil in the roots of the feathers, while others riot in any filth that may cling to the fowl, but any of them, if allowed access to the little chicks, will turn to sucking blood just as the mites and large head-lice do. If these last are allowed to accumulate in the fluff of the hen to great numbers, they will eventually cause sores and a watery discharge about and from the lower intestines. And anyway, who wants eggs to eat from such infected hens? It is nothing but pure laziness to allow hens to get so full of parasites, and if allowed to go on a nest of eggs in such misery, they will break many of the eggs because of the uneasiness the vermin causes them, and smash half the chicks that come out for the same reason.—Ida M. Shepler, in Twentieth Century Farmer.

Making a Stand Against Lice.

My losses a dozen years ago from lice and mites were rather heavy, but the past few years I have not been troubled much, as I do not let the vermin get a foothold. In the first place I keep everything clean and use plenty of fresh air, I dust the fowls regularly with lice powder and use plenty of whitewash and paint the roosts with disinfecting liquid. On the young chicks I use a preparation of my own for head-lice. A little lard about the size of a pea rubbed well on the back of the head of chicks will kill lice. From my point of view it is the operator's fault if he has lice and mites in such numbers as to make poultry-raising a failure. All plants have more or less of these vermin, but they can be kept down if the operator wants to and will make a stand against them.—D. Lincoln Orr, in Farmer's Review, Orange County, N. Y.

Good Shell Material.

A great many people forget that the modern hen produces several times as many eggs as the ancient hen that was the progenitor of the one we now have. That hen laid thirty or forty eggs a year and had no trouble to find the lime in the natural food. But it is a very different matter when a domestic fowl must produce good shell material out of her food for two hundred eggs during the year. The modern hen probably eats no more lime in her food; therefore, the farmer that does not provide important supplies of lime will have trouble with his flock. The eggs will have thin shells and there will be many soft-shelled eggs which will be a temptation to the poultry to begin egg-eating. It is easy enough to furnish the material if one does not forget. The professional poultryman never forgets; but the farmer does because poultry with him is merely a side issue.

Keep an old gander if you would protect young chicks from their enemies in the shape of dogs, cats, crows, and magpies. The gentleman will be found of great use, shifting all objectionable characters with commendable promptness. Not only will intruders be smartly looked after, but the gander will make as much noise as possible while performing his duty, thus giving the poultry-keeper and game-rear warning when all is not right.—Exchange.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals à la carte. Ask for tickets via the Nickel Plate Road. Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railway. This engraving is 26 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheildy Bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

When writing our advertisers please mention this paper.

DON'T SEND EAST for your Sluggie Comb Brown Leghorns. In four shows this season I have won 15 out of 19 blue ribbons competed for, and in three of these shows have had highest scoring bird in the show. Scores as high as 95% by Owen and Atherton and 94% by Rhodes. Stock for sale. Eggs, \$1 for 12; \$5 for 100.

CHAS. C. SMITH, Manhattan, Kansas.

Hatch Your Chicks at Our Risk

NOW is the time to get busy to "catch the early market" and make big money on chicks this year. YOU know that.

You can bring out a larger percentage of strong, vigorous healthy chicks with The "SURE HATCH" than any other incubator made. WE know that—and we'll prove it to you. Let us send you a "Sure Hatch" to try. Then go ahead and use it for TWO HATCHES—or for 60 days. See how simple it works—see the chicks come out—85% or more—notice how lively they are. Then if you think you can AFFORD to be without The "Sure Hatch" send it right back at our expense and get your money. Get our Big Catalogue with our small prices, order the sizes you want and we will ship immediately—do it NOW. Spring is here.

SURE HATCH INCUBATOR CO., Box J 42 Clay Center, Neb. Dept. J 8, Indianapolis, Ind.

85% Hatched
Prove It Yourself
DO IT NOW



Queen

The "QUEEN" is not an incubator but the Incubator THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC.

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

NEW and RECENT POULTRY BOOKS**The New Egg Farm**

By H. H. Stoddard. A practical, reliable manual upon producing eggs and poultry for market as a profitable business enterprise, either by itself or connected with other branches of agriculture. It tells all about how to feed and manage, how to breed and select, incubators and brooders, its labor-saving devices, etc., etc. 110 original illustrations. 331 pages. 5x7 inches. Cloth.\$1.00

Turkeys and How to Grow Them

Edited by Herbert Myrick. A treatise on the natural history and origin of the name of turkeys; the various breeds, the best methods to insure success in the business of turkey growing. With essays from practical turkey growers in different parts of the United States and Canada. Illustrated. 154 pages. 5x7 inches. Cloth.\$1.00

Poultry Architecture

Compiled by G. B. Fiske. A treatise on poultry buildings of all grades, styles and classes, and their proper location, coops, additions and special construction; all practical in design, and reasonable in cost. Over 100 illustrations. 125 pages. 5x7 inches. Cloth.....\$0.50

American Standard of Perfection

A complete description of all recognized varieties of fowls, as revised by the American poultry association at its twenty-eighth annual meeting. It contains all changes in and additions to the constitution and by-laws, and the text of the standard, as authorized to the present time. Illustrated 300 pages. 5 1/2x8 inches. Cloth, net....\$1.50

THE KANSAS FARMER CO.

Topeka, Kansas

POULTRY BREEDERS' DIRECTORY.**CHICK FEED**

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co.

Wichita, Kansas

KILLED BY RATS

Thousands of LITTLE CHICKS

Why do you allow it? You can stop it if you use my method. Every poultry keeper should know it. Rat-proof walls, poison, etc., are unnecessary. Mail one dime for complete descriptive instructions.

J. A. Thompson, 633 Garfield, Topeka, Kan.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

Topeka Supply House
7th and Quincy, Topeka, Kansas

SCOTCH COLLIES.

SCOTCH COLLIE—Scotch Collie pups from registered stock for sale. Emporia, Kansas, W. H. Richards, V. S., Emporia, Kans.

SCOTCH COLLIE PUPS for sale, \$4 and \$5 each. Pedigree furnished. G. B. Greslani, Box 102, Bucklin, Kans.

STEINMESCH'S CHICKENS

Winners at St. Louis and Portland. Farm raised. 15 varieties. Catalog FREE. Contains some Good Suggestions. Write. Steinmesch & Co., 312 Market St., St. Louis, Mo.

GREIDER'S FINE CATALOGUE

of Standard bred poultry for 1906, printed in beautiful colors, contains Fine Chromo, illustrates and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, inc., etc. This book only 10 cents. B. H. GREIDER, RHEEMS, PA.

\$12.80 For 200 Egg INCUBATOR
Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day. GEO. H. STAHL, Quincy, Ill.

Good Hatches Promised

It's a pleasure to hatch lots of chicks in a HATCH-ALL INCUBATOR. Pure air, even heat, little care, simple directions make it easy for beginners or those experienced to make money on poultry. Write for free catalog to HEBRON INCUBATOR CO., Box 18, Hebron, Neb.

\$7.00 Buys the Best 120-EGG Incubator
freight prepaid, ever made. Double cases all over; best copper tank; hot water; Brooder \$4.50. Incubator and Brooder ordered together \$11.00. Satisfaction guaranteed. Our book, "Hatching Facts" tells all about them. Mailed free. Write today. HELLO CITY INCUBATOR CO., Box 18, Racine, Wis.

self-regulating. Best 100 chick hot water Brooder. Double cases all over; best copper tank; hot water; Brooder \$4.50. Incubator and Brooder ordered together \$11.00. Satisfaction guaranteed. Our book, "Hatching Facts" tells all about them. Mailed free. Write today. HELLO CITY INCUBATOR CO., Box 18, Racine, Wis.

Dairy Interests

The Profitable Dairy Cow.

PROF. C. S. PLUMB, OHIO STATE UNIVERSITY.

Some years ago a young man named John Winslow graduated at an agricultural college. He was born and reared on a New England hill farm. There his father won a living for the family. In the main, from the keep of a herd of cows, the milk of which was sold to a nearby creamery. It was slow work, for the profits were not large, but they made a living.

The young man had a love for the country and the farm home. He had received a district school education, and gradually the idea had crystallized in his mind that he needed more education. His attention was directed to the agricultural college. An investigation convinced him that this was the type of institution that would enable him to become a broader, brainier, and more capable farmer. Ambition, health, work brought him through college. The four years passed by rapidly, and once again he was back on the farm.

But this was a different young man returning to the farm from the callow youth who had gone out from Rockdale four years before. His intellectual forces had strengthened and his capacity for grasping and solving problems had rapidly grown. His father soon realized that the young man of 22 was no longer a boy. He was a man whose judgment he could rely upon.

On various occasions during his college life, when visiting home, John had looked over the herd, and the thought gradually grew upon his mind that the cattle in the stable were not what they should be. In his Junior year he had taken a course of instruction, which involved a term of work studying breeds of live stock. Another term was partly devoted to the principles of breeding, and the subject of feeds and feeding occupied several hours a week the third term. All through this year of study, he had been given practical work in judging live stock. His father owned a dairy herd, and the instructor in animal husbandry in the college had been teaching him important lessons, which in his opinion had a direct application to the conditions at home.

PRACTICAL TRUTHS TAUGHT.

What were some of the real practical truths that he had been taught leading up to success? He had learned by repeated illustrations, that like produced superior offspring; that no great breeding that was a part of the creed of every great breeder; that poor animals mated produced poor animals; that sires from superior ancestry produced superior offspring; that no great breeder had ever risen to heights of eminence and built up a great herd, excepting by weeding out the inferior and breeding to superior; that pedigree was worth nothing unless backed by constitution and individual merit; that no man could be regarded as an intelligent breeder who did not breed on the basis of a knowledge of some of these things.

The laboratory or practical work in judging in those college days commended itself to John in no uncertain manner. There was a large room in one corner of the cattle-barn. Tannark covered the floor. Here the instructor brought his class of young men. A cow was brought in. The students were instructed in the various points which go to make up the animal form, and their relative importance to each other. They were told what the ideal, mature cow of this kind should resemble. Then they were requested to take blank score-cards and judge and score the cow before them, and see how she would compare with the ideal described. That was not easy the first day, but more practice smoothed the way. Finally several cows were brought into the room and were ranged up side by side, and the class was directed to judge and place them in their relative order of merit.

That is just what the judge did at the county fair, only he was obliged to give a written explanation on a specially prepared sheet of paper, as to why he placed those cows in the positions he did. Then finally the instructor placed them as he thought they should be, which was followed by a discussion of the placings of both students and teacher. That sort of thing was interesting, and John saw a connecting link here between this college work and the home herd.

There was a most important phase to this study of stock. As the lessons continued, it was pointed out that there

were different types of cattle that had gradually developed into high degrees of perfection, each in its class. This was beautifully illustrated on one occasion when this subject was first discussed. Three cows were led into the room, each quite distinct in type. One was spare of flesh, in fact her ribs showed somewhat, but she had a big body, rather short, clean-cut handsome legs, a thin fairly long neck and a gracefully turned rather short head. Back between her thin, muscular thighs below a broad, level rump, was suspended an immense udder, shaped like a half moon, while extending along the belly away from the udder were two big milk veins, twisted like a snake, remarkable in their development. The instructor told the class that such an udder should extend well forward along under the belly and up high behind the thighs, be level below and thick with four medium-sized teats one at each corner of the udder, and when milked out it should shrink up and feel mellow and pliable in the hand. This was a cow of the true dairy type, just a grade, but she was rarely beautiful John thought. And when she was milked out before the class, all that striking fullness disappeared and a shriveled, wrinkled udder one-half the original size was in its place. He had never seen such a cow as that at Rockdale. Alongside of her stood a broad-backed, deep-bodied cow, full and thick in bosom and hind quarter, short of leg and strong of neck. She was smooth and rather fleshy, and her udder was not important, but she would cut some great steaks. Then he was taught that this was a cow of the beef type, given to converting food into meat as the dairy cow did hers into milk. Then there was a third cow, neither lean nor fat, sort of half way between the other two, with a fairly large udder, that they were informed was a "dual purpose cow." As this young man from that mountain farm compared these cows, and as he later on came to be more and more acquainted with the details of difference, he began to feel that the herd at home was far, far from its profitable possibilities.

There were other lessons taught at this agricultural college that bore much on future problems to be solved. The college instructor in dairying required the students to test the cows of the college herd occasionally. They were obliged to take samples of the milk of each cow of the herd at each milking for a number of days in succession, and find out how much fat there was in the milk, so as to compare values. Here John learned that two cows might be giving exactly the same amount of milk though that of one contained twice as much butter-fat as the other. As creameries paid for milk on the basis of its butter-fat content, he soon saw that quality as well as quantity was an important consideration with milk-production. Thus as he attended his daily duties about the college, he came to see that success on that dairy-farm was dependent on several things, each important in itself.

These were some of the things taught this young man during the four years prior to his home-coming, and their value was never underestimated by him. Not long after his return his father gave him a half interest in the farm, and he settled down in a partnership full of anticipation of the future.

THE ROCKDALE HERD.

There was in his herd at Rockdale 16 native cows. They were just common, plain, everyday scrubs. John's father fancied some of them mightily, but he was not fortified by facts in this position. One day the junior member of the firm came home with a spring balance. He proposed to begin weighing the daily milk-yield of each cow. He knew it would not take much extra time, and they would learn something of what the cows were doing. The senior member smiled, but thought it a harmless pastime.

John said, "Father, we don't know enough about what our cows are doing. Do you know that records show that the average dairy cow in this State produces only 150 pounds of butter a year? There have been some mighty interesting investigations made by some of our experiment stations, which prove that we dairymen have some truths to learn that we should have learned long ago. Now, for example, the Illinois Experiment Station years ago, published a bulletin giving records of individual cows on eight farms in that State. It showed that there were 144 cows in these eight herds of a year's test. One herd made a net loss of \$4.54 on each cow, some made a small profit, and one got good

FACTS COMMONSENSE THE BIG TRUTH STICK

SMASHES WORTHLESS SEPARATORS

EASY OR HARD WHICH FOR YOU

Put Facts and Common Sense to work on a Tubular Cream Separator and you know it must be easy to operate. Put Facts and Common Sense up against a back breaking, hard to wash, high can "bucket bowl" machine and you can't make yourself believe it is easy to operate. In the light of truth, the out-of-date, "bucket bowl" separators go to smash. Which kind for you, the

Tubular	or	"Bucket Bowl"
Low Can	or	High Can
Simple Bowl	or	Bowl Full of Parts
Enclosed Gears	or	Exposed Gears
Self Oiling	or	Oil Yourself

Catalog O-165 tells all about Tubulars. Write for it.

The Sharples Separator Co.
Toronto, Can. WEST CHESTER, PA. Chicago.

Cream is Cash

AT The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business. Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in cash.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

**BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.**

Peerless Cream Separators

Reasons Why the 'PEERLESS' is the Best

- 1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.
 - 2d—Compound feature, two bowls in one, hollow bowl, and disk bowls, combining all the features of the tubular and disk machines.
 - 3rd—Enclosed frame. Free from dust. Injury resulting from machine impossible.
 - 4th—Perfectly noiseless.
 - 5th—Heavy enough and strong enough to lift a box car, which insures durability.
 - 6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-100 of an inch.
 - 7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.
 - 8th—at normal temperature the skimmed milk will always show less than 5 100 of 1 per cent of butter-fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.
- For further information, write

BRADLEY, ALDERSON & CO.,
Tenth and Hickory, KANSAS CITY, MO.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

You Can't Afford to Make a Mistake

Not in buying a cream separator. You can't afford to get a machine that needs constant repairs, or one that turns hard, or one that wastes cream, or one that breaks up the butter fat and produces poor cream, or one that is hard to wash—one that makes work for the good wife. You can't afford it. You need not do it.



Omega Cream Separator

on trial and find out for yourself whether or not the claims we make for it are true. It produces better cream, it causes less bother, it saves more work, it's easier on you, in every way, than any other cream separator made. Try it and see. That's all we ask.

A Trial Costs You Nothing.

And after you try it on your own farm you know for sure how easily it runs, how close it skims, how easily it's cleaned. Send your name today for trial offer and catalog.

This Book Free to You.

New book, "More Milk Money," tells how to care for separator cream; how to make good butter; how to select good dairy cows; how to prevent "white specks" in butter; how to wash and wash butter, and a hundred other things you ought to know. Ask for it and catalog. Free if you mention this paper, tell how many cows you keep and give address of a neighbor who keeps cows.

**The Omega Separator Co.,
23 Concord Street,
Lansing, Mich.**

Just think, six of these eight had cows that did not pay for the food they consumed. They found all sorts of records among these cows, but the one that had the best showing gave 8,945 pounds of milk and made 472 pounds of butter, while the poorest cow produced only 1,482 pounds of milk, which yielded but 63 pounds of butter. The average production of butter of seven of the herds was only 202 pounds a year, and I don't see how there is any money of importance in it for us if we can't beat that sort of record. So I propose to find out what our cows are doing."

It wasn't long before the whole family had begun to study the daily milk-sheet. The days crept by, and the milk record grew more and more interesting. Finally John proposed buying a Babcock fat-testing machine, and testing the milk of the individual cows for butter-fat content. They had tested the herd milk at the creamery, but this was not enough. This innovation came in more easily. The fascinating and suggestive work of the scales was emphasized by the Babcock. The months rolled by, and all the time John was investigating and thinking. Bill Brown, their nearest neighbor, didn't take any stock in such foolishness, and he knew the Winslow family would land in the poorhouse yet. He was just waiting for that joyful day, when he might say, "I told you so."

You remember that John learned something of dairy and beef type when in college. After he graduated, Prof. Haacker, of the Minnesota Experiment Station, wrote a bulletin which contained a record of his researches on dairy-cattle, in which he showed that cows of the dairy type had a special value over the other sort. This bulletin laid on the dining-room table, and the old gentleman picked it up and began to glance over its contents. There were some pictures in it, and these caught his eye. They represented cows of different types. Then he began to look over the contents of the bulletin. Finally he said, "John just look here. You know you have talked to me about this farm business with cows, but it never struck me as amounting to much. But this man Haacker seems to have a pretty good bit of evidence here that there is some meat in the cocoanut. He has been feeding some cows out there at the Minnesota Station, and he kept a record of every bit of food they ate and of all the milk each cow made and of the butter-fat in her milk. My, but that was a big job though. Now, he has divided up his herd into those with dairy type and those of general-purpose type, and this is what he shows they have done. He had 20 yearly records for each class. The dairy-type cows produced an average of 7,876 pounds of milk and 430 pounds of butter. The general-purpose type produced an average of 6,035 pounds of milk and 295 pounds of butter. In this book here, he says, that by valuing the skim-milk at 15 cents per hundred and

allowing one-eighth the milk for cream, there is an excess of \$2.42 in favor of the dairy-type cow for skim-milk, and allowing 16 cents for butter, the 135 pounds gain of the butter of this type gives a further gain of \$21.65. Adding this to the \$2.42 gives a total of \$24.07 in favor of dairy over general-purpose type. He also found that the fatter the cows were, or the less belly they had, the less money there was in them. Guess we'd better look into that, John."

(To be continued.)

The Feed and the Quality of Milk.

I find in a recent number of the Rock Island Enterprise a statement as follows:

"It seems that a number of dairy farmers here are laboring under the impression that the class and quantity of feed has a great deal to do with the percentage of butter-fat in the milk. Dr. G. A. Foote, M. Mortensen, K. U. Westerterps, and others who have made a scientific study of the matter say this is a mistake; that you can only get a certain percentage of butter-fat no matter what you feed, and the only way to increase the amount of butter-fat is to increase the quantity of milk."

Please tell me through your paper whether this is correct.

E. J. KNOWLLOY.

Rock Island, Texas.

- Butter-fat can only be fed into cows by increasing the yield of milk. The per cent of fat can not be increased materially by the class or quantity of feed. If this were not true, Holsteins could be made to give Jersey milk by feeding them oil meal, bran, and alfalfa, and Jersey milk could be reduced to from 5 to 3 per cent by feeding prairie hay, sorghum, and silage. This is entirely out of reason and scientific experiment.

The per cent of fat in the milk of any cow depends on her individuality. If it comes natural to her to give a large quantity of 3 per cent milk on full feed, she will only give a smaller quantity of 3 per cent milk on less or poorer feed. No two cows in any herd give exactly the same per cent of fat in their milk, although they may receive the same amount of the same kind of feed.

C. W. MELICK.

Kansas Experiment Station.

Septic Tank for Liquid Manure.

Before next winter this farm may be feeding 10 or 12 milch cows, and I shall endeavor to use all the stable manure and possibly, by building a cement floor and cistern, save and use all liquid manure. The best way of building a cow-barn and cistern and for utilizing this liquid manure. I have yet to learn, so am open for instruction. There is no barn-yard here yet. The pasture is close up to the barn. The rains drain away down the hillside the best of the stock-droppings.

FRANK S. GRISWOLD.

Johnson County.

Your letter regarding the utilization of liquid manure, which has been referred to me, can best be answered by referring to the use of a septic tank. This tank is so constructed below the surface of the ground that all of the liquid may drain into it from the bottom. It is made of cement similar to a cistern and will retain the liquid until forced to an over-flow spout by the inflowing matter. It is made with two or three separate divisions, with an over-flow in each so as to retain each day's inflow for at least 48 hours. By this means most of the organic matter is decomposed by the aid of bacteria of various kinds, and rendered soluble and ready for use by plant life. The organic matter is thus turned into the most profitable fertilizer known, besides being useful for irrigation. The liquid thus passed off, if the tank is working satisfactorily, ought to be almost clear.

A septic tank should purify sewage 40 or 50 per cent, that is, it should decompose organic material to that extent. The chief benefit of the septic tank, however, is that the liquid passing through it is much more easily utilized for it contains no solid material to clog the irrigating pipes.

C. W. MELICK.

A correspondent expresses some uneasiness lest, when every farmer goes into dairying instead of raising corn and wheat, the price of dairy products shall decrease so much as to leave no profits in dairying. That condition does not yet appear on the horizon. Dairying has the advantage of affording quick returns and, where good cows are used, liberal profits. It is an exacting business, however, and can not well be entrusted to the exclusive care of hired help. Milking must be done twice every day. Profits depend upon careful and competent milking and judicious feeding. Until an efficient milking-machine

IMPORTANCE OF BUYING CREAM SEPARATORS THROUGH LOCAL AGENTS

This heading voices a most important consideration in the purchase of a Cream Separator, and points a most serious objection to the purchase of such a machine by the "mail order" method, even if good separators were sold in that way.

While the Cream Separator is a simple machine when once understood, it is nevertheless of the greatest possible importance that it be set up and started just right, and that the user have the brief personal use instruction necessary in its handling and operation. If not it may mean several years of difference in the life of the machine and a good many dollars of difference in the results from its use.

Then, no matter how carefully used, things do happen even to the best of separators. It makes a lot of difference if you have a competent man near at hand to tell you just what is wrong and how to fix it. It makes even more difference to be able to get necessary repair parts right and quickly instead of having to send off to some distant concern for them which only sells machines somebody else makes and whose employees would not know a separator if they saw it and the parts for which are more likely to be wrong than right when you do finally get them.

All this is the business of the local agent of DE LAVAL machines. It is just what he is expected to do for users. Of course he makes a small commission out of it, but the user can mighty well afford to pay that commission and it would be a big mistake to try to save it even in the purchase of a good separator. It is still more so in the purchase of the kind which is sold in the "mail order" way.

The buyer of a Cream Separator should never lose sight of the big DAILY difference in dollars-and-cents results between the good machine and the poor one. A DE LAVAL catalogue to be had for the asking helps to make plain these differences.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.
1213 Filbert Street,
PHILADELPHIA.
9 & 11 Drumm Street,
SAN FRANCISCO

General Offices:
74 CORTLANDT STREET,
NEW YORK.
109-113 Youville Square
MONTREAL
75 & 77 York street,
TORONTO.
14 & 16 Princess Street
WINNIPEG.

U.S. Cream Separator

Osceola, Ia., Jan. 15, 1906.

After trying different makes of cream separators I decided to buy a U. S. as it is the easiest to clean, built most solid, and I believe will last me as long as I live. Have had my separator over two years, and it has made me \$20.00 more a year per cow than I made before. I figure that my calves raised on U. S. Separator skim milk pay for keeping my cows.

The cream is clear profit. I make over \$40.00 a cow clear a year. I don't feed any grain, so I consider I am doing well. If I didn't have over 12 cows I believe I could get good interest on my investment if I had paid \$500.00 for a U. S. Separator. I keep books, so there is no guess-work about it.

T. G. Armstrong.

What the U. S. has done for Mr. Armstrong it will do for you. Write now for a copy of our big handsome 1906 U. S. Separator catalog which tells how and why. Address—

VERMONT FARM MACHINE CO., Bellows Falls, Vt.
18 warehouses throughout the U. S. and Canada. 431

PAYS DOUBLE PROFIT

Cleveland Cream Separator

Direct to You.

The Only High Grade Separator Sold at a Reasonable Price.

Easy Running Because:

The Cleveland is the only all ball-bearing separator made. To compare ball-bearings with any other bearings made is like comparing a bicycle with a grind-stone.

Durable Because:

The Cleveland has the fewest parts of any separator made in the world. The fewer parts in a separator the less wear—the less repair.

Easy to Clean Because:

The fewest parts and the Cleveland skimming device made of aluminum. We were the first

The Cleveland Cream Separator Co. Dept. A, 34 Michigan Ave., N. W., Cleveland, O.

to apply this wonderful metal to this use. It is non-corrosive, non-poisonous, has no coating to wear off and milk will not stick to it.

The Selling Plan:

30 days approval test in your own home under your own conditions. You don't need to take our word. Try a Cleveland, the guaranteed perfect skimmer. It won't cost you a cent to be sure. You try one in your own home without putting up one cent in advance. The new free catalog tells you how. Write for it.

The Cleveland Cream Separator Co. Dept. A, 34 Michigan Ave., N. W., Cleveland, O.

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. L. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

shall be introduced, there will doubtless continue a disposition to abandon dairying, however profitable, and to engage in some less exacting kind of farming as soon as the farmer feels able to sacrifice the ready income afforded by the dairy. On this account, as well on account of the constantly increasing demand of the markets for dairy products, there is little probability that dairying will soon be overdone.

Weekly Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service, for the week ending April 9, 1906, prepared by T. B. Jennings, station director:

NOTE.—Beginning with the present issue, the first for the season of 1906, this publication will be known as the WEEKLY WEATHER BULLETIN of the Kansas Section of the Climatological Service of the Weather Bureau. It succeeds the Weekly Crop Bulletin series heretofore published in this form. The crop feature is omitted, but the weather data are given in greater detail.

CLIMATOLOGICAL DATA FOR THE WEEK

WESTERN DIVISION.

Stations	Temperature	Precipitation	
	Maxim-	Minim-	(In
	um	um	inches)
Colby	77°	26°	0.69
Coolidge	82°	27°	1.25
Farnsworth	85°	28°	1.06
Norton	83°	30°	0.85

MIDDLE DIVISION.

Stations	Temperature	Precipitation	
	Maxim-	Minim-	(In
	um	um	inches)
Clay Center	76°	30°	0.69
Eldorado	69°	33°	1.91
Ellsworth	77°	33°	0.65
Republic	76°	22°	1.84

EASTERN DIVISION.

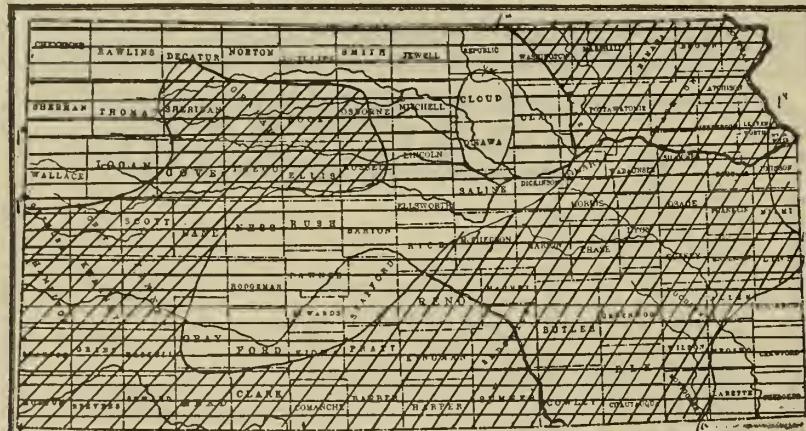
Stations	Temperature	Precipitation	
	Maxim-	Minim-	(In
	um	um	inches)
Fort Scott	77°	35°	0.61
Independence	74°	36°	1.12
Manhattan	77°	31°	1.08
Yates Center	77°	33°	1.84

GENERAL CONDITIONS.

The weather the past week was an agreeable change from that prevailing during the preceding month.

Under the influence of an area of low barometer the temperature over Kansas was raised considerably and the highest temperature for the season was experienced in the

RAINFALL FOR WEEK ENDING APRIL 7, 1906.



SCALE IN
INCHES:

Less than $\frac{1}{2}$. $\frac{1}{2}$ to 1. 1 to 2. 2 to 3. Over 3. T. trace.

western counties. This was followed by falling temperature, cloudy weather and rain, causing Wednesday to be the coldest day of the week. With the passage of the area of high barometer Friday, the weather became much warmer and the maximum temperature in the middle and eastern counties for the week generally occurred that day. Under the influence of an area of low barometer, central in Colorado on Saturday morning, showers were general in this State Saturday and the following night.

The minimum temperatures for the week were below freezing in the extreme northern and western counties.

CONDITIONS IN DETAIL.

EASTERN DIVISION.

Allen.—The week was warm, the 2d and 5th being the warmest days while the first was the coolest. The 1st and 2d were clear; the 3d, 4th and 7th cloudy and rainy and the 5th partly cloudy but rainy.

Bourbon.—We had much sunshine and two rainy days; good growing weather.

Brown.—A fine week; the lowest temperature, 32°, occurred on the 1st and the highest, 72°, on the 2nd and 6th.

Chase.—The weather has been rather damp with three rainy days. The day temperatures were warm on the 2d, 3d and 6th.

Coffey.—The 1st and 6th were clear, the other days cloudy and rainy, yet the weather has been good for vegetation.

Crawford.—This has been a warm, pleasant week with a fair amount of sunshine.

Greenwood.—This has proved the first good growing week of the season, being warm and damp with a fair amount of sunshine.

Jackson.—The week has been cloudy with four rainy days.

Linn.—With three clear days, four cloudy days, and three rainy days, the weather has been good for vegetation.

Lyon.—Though the temperature reached 70° on three days yet the week has been cold and wet, the minimum temperature falling below 40° on four days.

Montgomery.—The weather conditions were normal: the rain on the 4th and 5th delayed work but was needed to soften the ground. The week closed with cloudy weather and more rain.

Riley.—With rain on six days, frost on one and the minimum temperature below 40° daily, the week has not been good for the growth of vegetation.

Wilson.—The past week has been warm and springlike with much sunshine. Rain on two nights and one day was very beneficial.

Woodson.—The past week was a better growing week than we had had yet this spring. Three days with good rains and a fair amount of sunshine have been beneficial.

Wyandotte.—While the week has been warm, it has also been wet, rain falling every day but one. Six days were cloudy and the other one partly cloudy.

MIDDLE DIVISION.

Butler.—The 1st, 2d, and 6th were clear; the 5th partly cloudy and the remaining days

cloudy. The highest was 69° on the 2d and the lowest 33° on the same date.

Barton.—Rain fell on the 2d, 3d, 4th, 5th, and 7th. The first of the week was clear, the middle part cloudy and the last part was partly cloudy. It was very cool on the 4th but warmed up some towards the close of the week.

Clay.—The first and last of the week were warm and the middle part was cool and rainy. There was rain on the 2d, 3d, 4th, 5th, and 7th.

Cloud.—Showers fell on the 3d, 4th, 5th and 7th. The highest temperature was 76° on the 6th and the lowest 35° on the 4th. The 1st, 5th, and 6th had considerable sunshine but the other days were cloudy and damp.

Cowley.—Rain fell on the 3d, 4th, and 7th. The highest temperature was 75° on the 2d and the lowest 37° on the 6th. The middle of the week was cool, damp, and unsuitable for outdoor work.

Ellis.—Much sunshine during the week. 1st, 2d, 6th, and 7th warm days, 3d and 4th cold and rainy; good shower on 7th; hurricane, wind, and storm of dust afternoon of 7th.

Ellsworth.—Rain fell on the 3d, 4th, 5th and 7th, and on these days the weather was very disagreeable.

Harper.—Rain fell on the 4th and 7th.

Harvey.—The weather has been cloudy most of the time and very damp and rainy; over an inch of rain has fallen.

Jewell.—Rain and cool, damp weather prevailed on the 3d, 4th and 5th; the other days were clear and warm. The highest temperature was 77° on the 6th and the lowest 33° on the 3d, 4th and 5th.

Kingman.—The first of the week was clear, the middle part cloudy and damp and the last part was partly cloudy. Rain fell on the 3d, 4th, 5th and 7th. The highest temperature was 74° on the 2d and the lowest was 30° on the 4th and 5th.

Osborne.—Rainy disagreeable weather prevailed on the 3d, 4th and 7th. The forepart of the week was clear and pleasant.

Pawnee.—The first of the week was fine and clear, but the middle and latter parts were mostly cloudy with showers on the 3d, 4th and 5th. The thermometer rose to 76° on the 2d, but the minimum temperatures were in the thirties all week.

Pratt.—Rainy, damp weather prevailed on the 3d, 4th and 5th. Maximum temperatures the first and last of the week were in the seventies, but the minimum temperatures ranged in the thirties the middle of the week. The moisture for the week was excessive.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reino.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and pleasant. The lowest temperature was 35° on the 4th and 5th. On the 4th the maximum did not rise above 41°, but on the 6th occurred the highest temperature of the week, 73°.

Reno.—Showers fell on the 3d, 4th, and 5th and a trace of rain on the 2d. There was no

sunshine on the 3d and 4th but the first and last days of the week were clear and

GIFFORD'S SHORTHORNS

22D ANNUAL SALE FROM ELMWOOD FARM

WILL BE HELD AT

Manhattan, Kans., on April 25, 1906, in the Sale Pavilion

20 extra good red Scotch-topped bulls from 12 to 20 months old, all in fine condition, sired by Red Gauntlet 3d 147509, a Cruickshank bull of exceptional quality. Twenty of the best young cows and heifers ever offered from the herd, all bred to Scotch bulls Senator Bruce 226244 and Cordella's Knight 161501 (the best son of Red Knight). Cordella's Knight will be included in the sale, is sound and all right, and a great breeder. This will be the place to get a choice bull or a few good cows to start with. Come to the sale and bring your friends. For a catalogue address

COL. GEO. P. BELLows,
COL. L. R. BRADY,
COL. JOHN BRENNAN,

Auctioneers.

50 HEREFORDS 50

There will be about 50 CHOICE HEREFORD CATTLE SOLD AT PUBLIC AUCTION
AT SUPERIOR, NEB., ON APRIL 18, 1906

SALE BEGINS AT 1 O'CLOCK P. M.

This offering will consist of several cows sired by the great sire, Anxiety Monarch 63204, whose get has been very prominent at the leading shows of the West the last six years. Some of these cows will have calves at foot and breed again. Also blood of the great Ancient Britton and Vincent 2d 42942, both World's Fair winners in 1893. Some choice young bulls sired by Beau Donald 28th, the great sweepstakes winner and sire.

THE CATTLE WILL BE CONSIGNED BY THE WELL-KNOWN BREEDERS

P. M. MORSE,	Beaver City, Neb.	HATFIELD & SON,	McCook, Neb.
W. R. WONDERLY,	Inavale, Neb.	W. N. ROGERS,	McCook, Neb.
R. N. LEWIS,	Bladen, Neb.	BRITTAin & SON,	McCook, Neb.

and others

Auctioneers:

T. C. CALLAHAN
and others...

For Catalogue address,

W. N. Rogers, Manager

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
Kansas Farmer Co.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts, burn 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

■ HOLSTEIN—Hull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Hebrew Eclipse 34761 in service. A. L. Wynkoop, Hendens, Kans.

FOR SALE Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 1/2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Juvien, Kans. It. R. 2.

FOR SALE—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

HORSES AND MULES.

FOR SALE OR TRADE—For other stock, 2 well-bred jacks, all ready for service. We have too many and must sell them. Hughes & Carey, Route 3, Hartford, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 6 draft stallions, 20 coach stallions and 40 jacks at one-half the regular price. Write for bargains.

FOIT SALE OR TRADE—I have a large, black, 7-year-old jack that is a good foal-getter, which I will trade for a bunch of cattle or sell for money. Address H. J. Stevens, Wellington, Kans.

FOR SALE CHEAP—Fine young trotting-bred stallion, by Flood Wilkes. J. E. Breckbill, Detroit, Kans.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOIT SALE—I registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR SPRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat sway-backed. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

Stray List

Week Ending March 29.

Elk County—J. L. Logsdon, Clerk.
STEER—Taken up by John Chamberlin, in Painesfield, Vt. (P. O. Longton), Nov. 10, 1905, one red muley steer, 2 years old, silt and crop oil under part left ear; valued at \$25.

POULTRY.

THOROUGHBRED BLACK LANGSHAN EGGS FOR SALE—75 cents per sitting. Two or more sitting at 62½ cents per sitting. Address Morris Bond, Rossville, Kans.

BARRED ROCK EGGS—Heavy winter laying strains. Pen No. 1, \$1.50 per 15. Pen No. 2, \$1 per 15; \$5 per 100. Mrs. W. H. Schreier, Argonia, Kans.

BUFF ROCKS—From fine stock. Eggs \$1.50 per sitting. A few good cockerels, \$1.50 each. M. Madden, Mound City, Kans.

SILVER WYANDOTTES EXCLUSIVELY—Eggs from State Show winners, 15 for \$2. Farm range Silver, 100 eggs, \$4. Mrs. J. W. Gause, Emporia, Kans.

BARRED PLYMOUTH ROCK EGGS—From large, beautiful, pure-bred chickens, only \$1 per 15; \$5 per 100. Mattie Shearer, Frankfort, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1 each. Eggs, sitting \$1.50, for incubators, \$5 for 100. Address Ben Warren, Maple Hill, Kans.

FOR SALE—Silver Laced Wyandotte eggs; farm raised, \$1 per 15; \$4 per 100. Cumberland Raspberry plants, \$6 per 100. Frank Rice, Wathena, Kans.

COLLEGE HILL BARRED ROCK FARM—Prizes won 1906. Wichita, 100 competing, 1, 2, 3, 4 heas, 1, 2, 3, 4, cockerels, 1, 5 pullets, 1 cock, 1, 2 pens; Oklahoma, 1, 2 hens, 1, 2 pullets, 1 cockerel, 1 cock, 1 pen. Judges McClure and Emery. Stock and eggs guaranteed. Mrs. J. T. Woodford, Wichita, Kans.

Neosho Poultry Yards

Rose Comb R. I. Reds; score 90 to 94½ points. Eggs from yard No. 1, \$2 per 15; others, \$1.50. Single sittings, \$6 per 100. J. W. Swarts, Americus, Kans.

W. P. ROCKS EXCLUSIVELY.
Eggs for hatching 15 for 75 cents;
50 for \$2.

MRS. ALICE PERKINS,
Munden, Kansas

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50.
E. J. Evans, Ronne 4, Fort Scott, Kansas.

MILLER'S FAMOUS BARRED ROCKS

Every pen headed by a prize winner. First prize cockerel Kansas state show Jan. 1906. First prize cockerel St. Joseph, Mo. Jan. 1906. Second and fifth cockerel Kansas state show 1906. Also won first pullet Kansas state show 1906. First grand pen Kansas state fair Sept. 1905. If you want to raise first class stock get a sitting or two of eggs from my pens and you will be pleased with the results. Good hatches guaranteed. Send for descriptive circular. Price \$2 per 15 or 30 for \$3.50. Let me book your orders now. A. H. Miller, Bern, Kans.

MISCELLANEOUS.

DISCRIBE YOUR WANTS—We submit them to our customers free. Mutual Benefit, Omega, Oklahoma.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; see 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

FOR SALE OR TRADE—The best livery stable in Topeka, from 21 to 27 boarders, will invoice over \$2,000. \$1,800 cash takes it or will trade for country store. Ill health reason for selling. Address W. R. Falkner & Co., 109 West 7th St., Topeka, Kans.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kanas.

GOOD POSITIONS as salesmen now open in every state. Experience unnecessary if a hustler. Steady work, good pay and promotion. Apply at once to Morotock Tobacco Works, Box D 61, Danville, Va.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½ x 5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. If it fits the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. It. Gregg, Gregg's Studio, Emporia, Kans.

JENSLAW CUTTER—For sale a nearly new Jenlaw cutter, self feed, 10 ton capacity per hour. Will sell at a bargain. Address E. W. Adams, Herrieton, Kans. Topeka Independent phone 8602.

WANTED—At once sound young men for brakemen and brakemen on railroads; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 TO AS HIGH AS \$155.50 PER MONTH. Wanted—100 young men and sound men of good habits to become brakemen and brakemen. High demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 292 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 40, 31 Monroe St., Chicago Ill.

SWINE.

FOR SALE—20 good strong spring and yearling Hereford hams that are just what the farmer wants. Prices right. Address E. W. Melville, Euclid, Kans.

F. M. GIFFORD,
WAKEFIELD, KANSAS.

SEEDS AND PLANTS.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes six kinds. Price on application; also a fine lot of eating sweet potatoes. T. P. Myers, Hayeleville, Kans.

FOR ONE DOLLAR I will send you 300 strawberry plants, 5 kinds, or 100 raspberry, 3 kinds, or 100 blackberry, or 25 grapes, 3 kinds, or 25 currants or 25 gooseberries or 200 asparagus; none better at any price. A. J. Nicholson, Manhattan, Kans.

HELP WANTED.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

LEGAL.

Publication Notice.

In the District Court of Shawnee County, Kansas, A. M. Cowles, Plaintiff, vs. Flora S. Wright, et al., Defendants.

The State of Kansas to Flora S. Wright, E. Payton Wright, and W. W. King.

Greeting: You are each hereby notified that A. M. Cowles on Mar. 31, 1906, filed her petition in the court above named against yourselves, as defendants, and that you must answer said petition by the 17th day of May, 1906, or the same will be taken as true, and judgment will be rendered in said action barring each of you from any interest in, and quieting the title of the plaintiff to, the real estate described in her petition to wit:

Lots 4, 5, and 6 on McVicar Avenue in Ensminger's Subdivision of Lots 2 and 5 of Block 8 in College Hill Addition to the City of Topeka, in Shawnee County, Kansas, according to the recorded plats of said Addition and Subdivision.

A. M. COWLES.

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,

Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.

P. O.

NEW BOOK

JUST ISSUED

SUCCESSFUL FRUIT CULTURE

A Practical Guide to the Cultivation and Propagation of Fruits.

By SAMUEL T. MAYNARD,
Formerly Professor of Horticulture at the Massachusetts Agricultural College.

This book is written from the standpoint of the practical fruit grower; it is up to date in every particular, and covers the entire practice of fruit culture. It gives in plain, practical language, descriptions of such varieties as are most in demand in our markets, and the methods practiced by the most successful cultivators of many sections of the country. Separate chapters are devoted to the apple, pear, peach, apricot, and nectarine, plum, cherry, quince, mulberry, grape, blackberry, raspberry, cranberry, strawberry, blueberry, buckwheat, subtropical fruits, propagation of fruit trees and plants, fruit growing under glass, insect pests and fungous diseases. The chapter on the apple is particularly comprehensive and complete, forming a monograph in itself. The chapter on forcing peaches, grapes, strawberries, and other fruits, describes the most successful methods of the present day, and is the most recent practical treatise on this important industry.

Illustrated, 5x7 inches, 265 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA, KANSAS

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD J. U. HOWE,
Wichita, Kansas
Farm two miles west of city on Maple Avenue

Crimson Wonder 38755 Herd
Will have something fine to offer. Can furnish trials not akin sired by Crimson Wonder 38755 and Kerr's Champion 28355.
Mr. & Mrs. Henry Shrader, Wauneta, Kans.

Orchard Hill Herd of Duroc-Jerseys.
Some fine summer and fall males for sale.
Summer gilts are being bred.

R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled
Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

Egypt Valley Durocs
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

ROCKDALE'S DUROCS
I am offering my entire crop of spring gilts, fall yearlings, and six and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

**Highland Herd
of Duroc-Jersey Swine**

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Fox by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

STEELE'S DUROCS

Six winter boars for sale. Old enough for summer service.

S. B. STEELE
Waterville, - - - Kansas

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland Ching Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 33349; also a boar pig by Compromise 88203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice, 180' head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 303768 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

**GUS AARON'S
POLAND-CHINAS**
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also herd sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27986, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

**E. E. Axline's Public Sale
of Poland-Chinas**
AT
Independence, Mo., April 5, 1906

THIRTY HEAD—10 bred gilts, 10 open gilts, 10 choice young boars. Send for catalogue.

E. E. AXLINE, - - - Oak Grove, Missouri

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented. H. N. HOLDEMAN, R. R. No. Girard, Kans.

**Decatur County Herd of
POLAND-CHINA SWINE**
12 fall boars for sale out of Chief Tecumseh 2d and Corrector sows, and sired by King Perfection by Royal Perfection. I will sell them right.

R. H. WEIR, Route 3, Oberlin, Kans.

**ROME PARK POLAND-CHINAS
and BERKSHIRE BOARS**

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

**T. A. HUBBARD, (County Treasurer Office),
Wellington, Kans.**

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas.

**Spring Creek Herd of
POLAND-CHINA SWINE**

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

**G. M. Hebbard,
Route 2, - Peck, Kansas**

**HIGHLAND FARM HERD OF PEDIGREAED
POLAND-CHINAS**

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32604, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kan.

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

**POLAND-CHINA
Bred Sows**

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

Chester-Whites

O. I. C. SWINE
Choice young stock of both sexes for sale at very low prices.

S. W. ARTZ, Larned, Kans.

**World's Fair
CHESTER-WHITE HOGS**

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

**O. I. C. Hogs
Scotch Collie Dogs
B. P. Rocks**

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

**PRIZE WINNING
O. I. C. SWINE**

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Una, Silver Mine and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

Berkshires**EAST RENO BERKSHIRES.**

FOR SALE—One March gilt and choice young boars for service; also choice fall pigs, both sexes. All of the famous Bl. Robinhood, Berryton Duke and L. Premier strains. A. D. Willems, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jourist topper 7627.

Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

SOLD OUT except one yearling boar. Get in your order for pigs of spring farrow. One herd boar for sale.

**MANWARING BROS.,
Route 1, Lawrence, Kan.**

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds. 40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 800 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

**KNOLLWOOD
BERKSHIRES**

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy, Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 365025, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus

**Aberdeen-Angus
Cattle**

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

**Addressee
PARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kas.**

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited.

Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE Herd now numbers 115 head. Young bulls for sale.

**GEO. GROENMILLER & SON,
ROUTE 1, POMONA, KANSAS**

**RED POLLED CATTLE AND
POLAND-CHINA SWINE.**

Best of breeding. Write or come and see.

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle

Young Stock for sale.

WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens.

Address, S. C. BARTLETT,

Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

When writing advertisers please mention this paper.

Herefords**Registered Herefords**

Individual merit and choicest breeding. Dale Duplin 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

**Vermilion Hereford Co., VERMILION,
Boatman 56011 and Lord Albert 131557 head of herd.**

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 19225, and Printer 86634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

Shorthorns

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by L. A. MEAD, Kingsdown, Ford County, Kansas. For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM
JOHN REGIER, Prop., Whitewater, Kans. □
Breeder of thick-fleshed, early-maturing Shorthorn cattle.

NONPAREIL STAR 18848 at head of herd.

Plainville Shorthorn Herd
Headed by Prince Lucifer 188685
A pure Scotch bull. Stock for sale at all times.

N. F. SHAW, PLAINVILLE, ROOKS CO., KANS.
Forty miles south of Kansas City.

MEADOW BROOK SHORTHORNS
Herd headed by Baron Goldsmith 224633, by the Baron 12327; females bred to him and choice young bulls for sale.

T. C. KINGSLEY, Dover, Shawnee County, Kans.
Railroad Station, Willard, Kans. Long Distance Telephone

SELDON STOCK FARM OF SHORTHORN CATTLE
Our herd was established 18 years ago in Iowa. In our herd are such families as Young Mary, White Rose, Pomona, Secret, Arabella, Lady of Athol, Dulcibella, Young Phyllis, etc. We have only four young bulls left. Write us for prices.

HODALEY & SIGMUND, Selden, Kans.
Mention Kansas Farmer.

Shorthorns**Cedar Heights Shorthorns**

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

**New York Valley Herds
of Shorthorns and Berkshires**

Barou Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. Yates Center, Kans.

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldfinch, full sister to the Champion Lavender Viscount in service. Cruckshank and Crulckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Holsteins

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS.
Young bulls and a few young cows and
heifers for sale.

Collections made in all parts of the United States
No fee charged unless collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency
415 Kansas Avenue.
TOPEKA. KANSAS
Special attention given to stock-breeders accounts.
Reference furnished on application.

When writing advertisers please
mention this paper.

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Horses and Mules

W. A. Fleischer, Hoyt, Kansas
Breeder of
Mammoth and Spanish Jacks
also Poland-China hogs. Young Stock for sale at all times. Write for prices.

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, price right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

REGISTERED BLACK MAMMOTH
and CATALONIAN JACKS, SADDLE and TROTTING HORSES

The best in the state and at a low price. Come, or write for prices on what you want.
G. A. FEWELL
LEETON, JOHNSON CO., Mo.

Riverside Stock Farm

Imported and home bred Percheron stallions and mares. Standard bred animals of both sexes. Also Shorthorn cattle. Twenty choice stallions for sale.

When writing mention Kansas Farmer.

O. L. Thisler, Chapman, Kas.

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 18 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to registry, weight about 1,700 pounds

4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

Auctioneers**Col. T. E. Gordon****Live-Stock Auctioneer**

Waterville, - Kansas

Reference: Those for whom I have sold.

Barn Plans and Outbuildings

New, revised and greatly enlarged edition,
Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARN
CATTLE BARN AND STABLES
DAIRY BARN
CATTLE SHEDS
SHEEP BARN AND SHEEDS
PIGEONRIES
POULTRY HOUSES
CARRIAGE HOUSES AND HORSE BARN
CORN HOUSES AND GRIDS
ICE HOUSES

ICE HOUSES AND COOL CHAMBERS
DAIRY HOUSES
CREAMERIES AND CHEESE FACTORIES
SPRING HOUSES
GRANARIES
SMOKE HOUSES
DOG KENNELS
BISOS
ROOT CELLARS AND ROOT HOUSES
BUILDINGS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5 x 7 inches, 401 pages.

Cloth, price, postpaid, \$1.00

THE KANSAS FARMER CO.
TOPEKA, KANSAS

Live-Stock Auctioneers**JOHN D. SNYDER,**

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

R. L. HARRIMAN**AUCTIONEER**

Bunceton, Mo.



First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS**Live Stock Auctioneer**

MARSHALL, MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.

Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty
All Herd Books. Catalogues compiled. Sale tent free.

**Booklet on
The Southwest Limited**

Before planning your next trip East it would be worth your while to look through the booklet describing The Southwest Limited, the Train of Trains from Kansas City to Chicago, via the

Chicago, Milwaukee & St. Paul Railway

It will be sent free to those interested. A postal to the undersigned will bring it by return mail.

The Southwest Limited leaves Union Station, Kansas City, 5.55 p.m.; Grand Ave., 6.07 p.m. Arrives Union Station, Chicago, 8.20 a. m.

The Southwest Limited took first place in its first year—and holds it.

G. L. COBB
Southwestern Passenger Agent

Tickets, 907 Main Street
KANSAS CITY

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. ■ Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

FRANK IAMS



and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska 1905 State fair (over all). They are "sensational show stallions"—"Iams' sort." Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humblegged" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

50—STALLIONS—50

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent tan stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices," Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser," but "he has the goods" better than he advertises. Teddy, it's "16 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a clinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the Xmas tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$12 ½ stallions are much better than our neighbors paid those Ohio men \$4000 or. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

ELDORADO STOCK FARM

A choice lot of Imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

REGISTERED PERCHERONS,

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, Westphalia, Kansas.

200 HEAD

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.

Profitable Stock Feeding

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY.
NEBRASKA, UNIVERSITY.

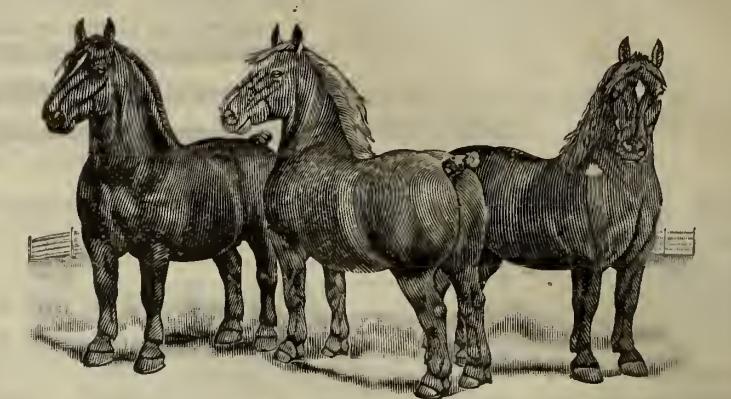
How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to the Kansas Farmer for only \$2.00. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

The Lincoln Importing Horse Com'y

Lincoln, Nebraska



Now we are here with our catalog. It is ready for distribution. Parties contemplating buying stallions write for catalog. Remember, every stallion represented in the catalog is of our own importation and all of them this year's importation, except the group of three. We also have a large number of stallions not exhibited in our catalog. Note what we say in regard to this group. The three weigh 5,890 pounds; the largest stallions in the West in the same flesh. Some of our 2-year-olds of our last importation will tip the scales at 1,850 to 1,900 in only moderate flesh. Come and examine them at our expense if you find that we have misrepresented to you. Remember, our scales are in front of our office. You do your own weighing.

A. L. SULLIVAN, Manager.

CHEYENNE VALLEY STOCK FARM PERCHERONS

Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

The Kansas Farmer 13 Weeks Free

See offer on another page.

THE AMERICAN QUEEN

NEW YORK

A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas. Beautifying Homes, Splendid Stories, Brilliant Humor. Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....	PEARSON'S MAGAZINE
NATIONAL MAGAZINE	AMERICAN BOY OR.....
PHYSICAL CULTURE MAGAZINE.....	

FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

GEO. ALLEN'S STRAIGHT CRUICKSHANK SHORTHORN SALE

At Sale Pavilion, South Omaha, Nebraska, Tuesday, May 1, 1906

I will consign at public auction four head of pure Cruickshank and Scotch Shorthorns of my own breeding, of which twenty-seven are cows and heifers from one to four years old, and fourteen bulls from twelve months to three years old, representing such choice Cruickshank families as Victorias, Lavenders, Secrets, Barometers, Butterflies, Annithuses, Village Princesses, Matchlesses of Mull Valley, Missies and Nonpareils and one pure GRAND DUCHESS cow without an ootcross. Note the breeding of a few of those in the sale:

No. 3. SAREPTA DUKE 238508. (Bull.)

Roan, calved Oct. 22, 1902. Bred by Geo. Allen, Lexington, Neb.
Got by Godwin 115676.....Col. W. A. Harris
Sarepta 2d.....Imp. Master of the Rolls 99463.. A. Cruickshank
Sarepta.....Golden Drop of Hillhurst 39120... W. E. Simms
Imp. Sorrow.....Roan Gauntlet 45276..... A. Cruickshank
Sirname.....Pride of the Isles 45274..... A. Cruickshank
Surmise.....Champion of England (17256)..... A. Cruickshank
Superb.....The Czar (9947)..... A. Cruickshank
Splendor.....Lord Sackville (13249)..... A. Cruickshank

No. 7. Barmpnton Duke 255628. (Bull.)

Dark roan, calved Nov. 30, 1904. Bred by Geo. Allen, Lexington, Neb.
Got by Godwin 115676.....Col. W. A. Harris
Barmpnton Princess.....Golden Aberdeen 119403..... C. S. Barclay
Barmpnton Leaf 2d.....Field Officer 97964..... A. Cruickshank
Imported Barmpnton Leuf.....Cumberland 50626..... A. Cruickshank
Barmpnton Spray.....Caesar Augustus (35704)..... A. Cruickshank
Barmpnton Flower.....Allen (21173).....W. Sterling

No. 2. COUNTESS VICTORIA 2d. Vol. 66.

Roan, calved July 10, 1905. Bred by Geo. Allen, Lexington, Neb.
Got by Godwin 115676.....Col. W. A. Harris
Victoria Countess.....Imp. Collynie Archer 14994..... Wm. Duthie
Victoria Princess.....Color Guard 106907..... Col. W. A. Harris
Imp. Victoria 67th.....Lord of the Isles 45269..... A. Cruickshank
Victoria 55th.....Lord Lancaster 20239..... A. Cruickshank
Victoria 48th.....Lord Lancaster 20239..... A. Cruickshank
Victoria 39th.....Champion of England (17526)..... A. Cruickshank
Victoria 29th.....Red Knight (11976)..... J. Booth

No. 16. NONPAREIL LADY 3d. Vol. 66.

Red, calved Feb. 9, 1904. Bred by Geo. Allen, Lexington, Neb.
Got by Godwin 115676.....Col. W. A. Harris
Aberdeen 117795.....Geo. Campbell
Victoria Nonpareil 2d.....Spartan Hero 77932..... A. Cruickshank
Nonpareil Red Lady.....Vice Consul 95532..... A. Cruickshank
Imp. Nonpareil Princess.....Golden Prince (38363)..... S. Campbell
Nonpareil 31st.....British Prince (33226)..... Lambert
Nonpareil 29th.....Duke (28342)..... S. Campbell

In selecting the foundation of my herd I was careful to get the best Cruickshank breeding and individuals to be found, and they cost me from \$500 to \$1000 each. This consignment is made up of choice young animals, many of which I would have preferred to keep, but it being my first sale in the West, I desired to make it an attractive one. All cows and heifers old enough for service will be safe in calf, or have calf at side by the Scotch bulls whose pedigrees will appear in the catalog, which will be sent on application. Breeding lists furnished at time of sale. This will be a good time to get choice show cattle and herd-henders.

Col. Geo. P. Bellows } Auctioneers
Col. T. C. Callahan
H. E. Heath, Clerk, Omaha

GEO. ALLEN, Lexington, Neb.

Shorthorn Dispersion Sale

Hope, Kansas, April 26, 1906

50 Head including the great herd bull, The Rustler 186800, sired by the Lad For Me 140618 and out of the dam of the champion Ruberta. The 14 of his get, 9 heifers, 5 bulls, calves and short yearlings, that are in the sale, prove him one of the greatest sires in the West. The balance of the offering are cows and heifers bred to this great bull; a few of them have calves at side.

Send for Catalogue

Cols. Sparks and Brady, Auctioneers

H. R. Little, Hope, Kansas

Five Noted Shorthorn Breeders



C. E. Leonard & Son

Bunceton, Mo.

Harriman Bros.

Pilot Grove, Mo.

Gentry Bros.

Sedalia, Mo.

N. H. Gentry

Sedalia, Mo.

June K. King

Marshall, Mo.

PUBLIC SALE OF

Shorthorn Cattle...

THURSDAY, APRIL 19, 1906

Hiawatha, Kansas

32 COWS AND HEIFERS

22 BULLS

Held under the auspices of the Brown County Improved Stock Breeders' Association. This offering consists of choice selected animals that are considered worthy specimens of the breeding establishments represented. All females of breeding age will be bred to Scotch and Scotch-topped bulls. Some will have calves at foot. Bulls guaranteed breeders with proper care. The pure Scotch herd bull, Baron Mysle, 176261, will be sold. The breeding establishments represented by this offering are as follows:

G. Y. Johnson, Wills, Kans.
T. J. Sands, Ralston, Kans.
Everett Hayes, Hiawatha, Kans.
John McCay, Sublette, Kans.
James P. Lair, Sublette, Kans.

Geo. Manville, Funette, Mo.
W. W. Brown, Weston, Mo.
Ed. Schuler, Falls City, Neb.
A. F. Baldwin, Morrill, Kans.
Bert G. Wise, Reserve, Kans.

For further information and catalogue address

EVERETT HAYES, SECRETARY and MANAGER, :: :: HIAWATHA, KANS.

All bids may be sent to COL. GEO. P. BELLOWS, Auctioneer.

40 Choice Shorthorn ..Cows and Bulls.. 40

AT NEW SALE PAVILION, STATE FAIR GROUNDS,

Sedalia, Missouri, April 20, '06

(On Main Line Missouri Pacific and Missouri, Kansas and Texas Railways)

NOW IS THE TIME TO BUY.

Attend this sale and take home some of the money making kind. Nearly all of the females will be safe in calf to bulls that stand at the heads of these noted herds. The bull offering will consist of some worthy herd headers, also a few young ones of the kind that the prosperous farmer needs on his farm. Remember the date and place, and be on hand. For catalogue address the consignors, or The Ruralist Sedalia, Missouri. Send mail bids to auctioneers or W. E. Hurlbut, clerk, Sedalia, Missouri.

Col. R. L. Harriman and Geo. P. Bellows, Auctioneers.

CHAS. R. GENTRY, Mgr., Sedalia, Missouri

MISSOURI STATE FAIR Sixth annual exhibition, Sedalia, Missouri, Sept. 28 Oct. 5. Cash Premiums 36,000 Dollars.

TOPEKA,

KANSAS

The Kansas Farmer
The Greatest and Best Advertising Medium for
Reaching the Farmers of the Middle West, of
TOPEKA,

\$
19
90

CREAM SEPARATOR

\$19.90 IS OUR PRICE FOR THIS WONDERFUL NEW IMPROVED 1906 MODEL HAND CREAM SEPARATOR

AT ABOUT ONE-FOURTH THE PRICES CHARGED BY OTHERS we furnish the highest grade hand cream separators made in the world. Compared with any other separators made, ours has greater capacity, skims closer, skims colder milk, runs easier, is stronger, less liable to get out of order, will wear longer and, besides, our price is a mere fraction of what others charge.

**WE GIVE YOU TWO MONTHS' FREE USE
AND FREE TRIAL,**

we issue a binding twenty years' guarantee, we take care of your separator for you free from the day you receive it, and we will always in the years to come furnish you any needed repair or part promptly on a day's notice. IT IS SO EASY TO HANDLE that by following the simple printed instructions we send you, anyone, without previous experience, can operate it at once and do better and more work than can be done with any other separator made.

**OUR SEPARATOR WILL SKIM 1,000 POUNDS OF MILK PER HOUR
AND DO IT CLOSER, BETTER AND EASIER THAN ANY OTHER SEPARATOR OF LIKE
SIZE WILL SKIM 500 POUNDS IN ONE HOUR.**

OUR SEPARATOR WILL SKIM TWICE AS CLOSE, twice as much, twice as easy, last twice as long as any other hand cream separator made, and yet we furnish it for just a few dollars compared with the prices charged by others. Our price is based on the actual cost of material and labor, and is a small part of what others charge, and our terms are so liberal, too.

OUR BIG FREE SEPARATOR BOOK



**THIS BIG BOOK IS
FREE
FOR THE ASKING.**

IT WILL BE SENT TO ANY ADDRESS BY MAIL, POSTPAID, FREE ON APPLICATION

It's the most complete book and catalogue on cream separators ever published; contains more information and is worth more to anyone who owns cows than all other separator books or separator catalogues ever printed, yet it will be sent to any address by mail, postpaid, free on application. This wonderful free book is new (just out), fresh from the printing press.

**IT IS 14 INCHES LONG,
AND 7 INCHES WIDE,**

a thick, heavy, free book and catalogue; shows our separators in their exact colors, contains endorsements of the biggest banks in the country, copies of guarantees, certificates, free trial proposition, free sixty days' use in your own home offer, copies of diplomas, awards and medals taken in competition with other separators at expositions all over the world, tells just what the freight charges will be on any separator to all parts of the United States, contains endorsements, testimonials, references, guarantees and comparisons as made between our machines and all other separators by customers of ours, farmers in the leading towns in every state. The big free book tells you how we can make the price so low, why our machine is better than any other made is made very plain, why it is stronger, lighter running, will skim closer, is easier to clean and has about double the capacity of any other separator, is all made very clear in this free book. This big free book shows pictures of every piece and part of our wonderful separators, full and detailed description of everything that goes to make up the best separator in the world, all shown by handsome pictures and complete descriptions, pictures of the factory and all manufacturing book, just from the press, tells more about cream separators than you could possibly learn from any separator agent or salesman or from all other separator catalogues yet published, and the big book is free for the asking, will be sent to any address by mail, postpaid, free on application. We are glad to send it to you free whether you ever buy a separator from us or not, so whether you own one cow or a hundred cows, few or many, don't fail to write for this big free book with our many new and astonishing free offers.

On a postal card or in a letter to us simply say, "Send me your free Cream Separator Offer," and you will get this Big Book and all, FREE, by return mail, postpaid.

OUR GREAT FREE OFFER

ON A POSTAL CARD or in a letter to us simply say, "Send me your free Cream Separator Offer," and you will receive by return mail, free, postpaid, our latest big

SPECIAL HAND CREAM SEPARATOR CATALOGUE

and special book (just out), the book that is illustrated and described hereon, the big thick book, 14 inches long and 7 inches wide, with all the pictures of machines, parts, departments, buildings, equipment, challenges, certificates of test, guarantees, free trial, free use, diplomas, awards, medals, official and general endorsements, competitive tests for light running, close skimming and great capacity and endurance, as given by our farmer customer friends in competition with all of the leading separators in all parts of the country. When you write for this big free book you will also receive

**OUR TWO MONTHS' FREE TRIAL
AND FREE USE PROPOSITION
AND WE WILL SEND YOU WITH THE BIG BOOK OUR LATEST AND
THE MOST LIBERAL CREAM SEPARATOR
OFFER EVER MADE**

Everything will go to you by return mail, postpaid, free with our compliments. If you have one cow, two cows, a dozen cows or a hundred cows, more or less, if you are already using a separator of any kind, if you have any thought of buying a separator, regardless of what offer any other maker or seller may make you, if you are the owner of one or more cows, any number, don't fail to write us. On a postal card or in a letter to us simply say, "Send me your free Cream Separator Offer," and get the big book, the new catalogue just out, the great book on Cream Separators, with all the many new, attractive and astonishing offers. Do this by all means before you think of buying any other separator from any other maker or seller at any price on any terms or conditions. First, get our latest and most wonderful offer. Remember, simply on a postal card or in a letter to us say, "Send me your Cream Separator Offer," and everything goes to you by return mail, postpaid, free.

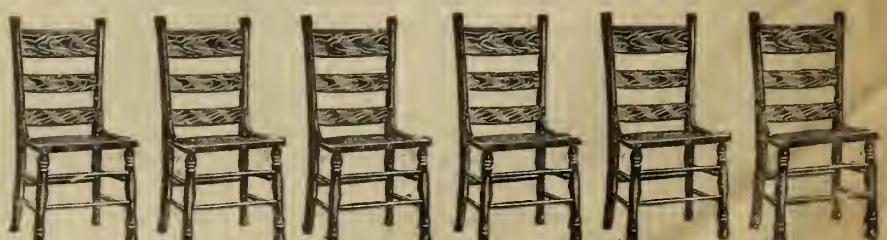
**OUR SEPARATOR WILL SAVE YOU FROM
\$10.00 TO \$15.00
A YEAR ON EVERY COW YOU KEEP,**

Paying for itself several times over in a year; besides, remember, two months' use costs you nothing. Don't fail to write and let us mail you our free book and wonderful free trial and free use separator offer.

THESE SIX CHAIRS FREE

WE WILL SEND YOU FREE these six large sized, beautifully finished, hand-somely embossed, hardwood, cane seated chairs when all your orders to us have amounted to \$50.00, or you can have your choice of many other valuable pieces of furniture or other useful things; a buggy, harness, saddle, bedroom suite, organ, couch, dresser or your choice of hundreds of similar valuable articles. All this will be fully explained when you write for our latest free cream separator catalogue.

If you do not keep cows, if you have no use for a cream separator at any price, on any kind of an offer, if no price, however low, no offer, however liberal, no terms, however unusual, would interest you in a cream separator, then please do us the favor of handing this paper containing this announcement to some friend or neighbor who keeps cows, for we urge everyone who keeps cows, few or many, to write us on a postal card or in a letter, saying, "Send me your free Cream Separator Offer," and get everything we will send by return mail, free, postpaid. Address,



SEARS, ROEBUCK & CO., CHICAGO



WRITE TODAY
SURE.
DON'T DELAY.
PLEASE STOP
JUST LONG
ENOUGH TO
ADDRESS A
POSTAL CARD
OR LETTER TO
US AND SAY,
"SEND ME
YOUR FREE
CREAM
SEPARATOR
OFFER."

630.5
KAT

UNIVERSITY LIBRARY

KANSAS FARMER



Volume XLIV. Number 16

TOPEKA, KANSAS, APRIL 19, 1906

Established 1863. \$1 a Year

New Zealand: A Land of Peace and Plenty

BY WILLIAM BRUCE LEFFINGWELL.

New Zealand was discovered by Capt. Abel Jansen Tasman in 1642, after whom the Tasman sea is named. This sea extends between New Zealand and Australia and is from 1200 to 1400 miles wide.

Tasman did not meet with a cordial reception from the natives. Upon attempting to land he found them decidedly inhospitable, so much so that they seized and murdered several of his sailors.

He, in his reports, described the country as one of great scenic beauty and destined to become one of great commercial interest to the world when once civilization was in force and the natives subjugated by the domestic influence of the white races. His attempt to land, his repulse, and his lack of sufficient forces to conquer the natives, led him to other scenes, and the country was not visited by other explorers until the year 1769, when Captain Cook landed on the islands and through himself and associates began the opening up and development of the country.

STOCK IS INTRODUCED IN THE COLONY.

An acorn drops from a gigantic oak and mingles with the soil. An unimportant event at the time, but by the law of nature, which causes propagation and reproduction, the acorn is nursed by the rains, the dew, the sun, and the soil, until its life-producing qualities assert themselves; the acorn forms into a sprout; it bursts from its shell; it struggles through the soil, drawn by the magnet of the sun's rays until a modest tip of green peers timidly through the earth, grows into a twig and time changes it into a mighty tree. Capt. Cook was a philosopher, a philanthropist, a far-seeing individual. He gave to the natives three animals hitherto unknown to them. They were common pigs, and he charged the natives with the importance of protecting them and leaving them to multiply, assuring them that their fecundity was such that in years to come they could depend upon their increase for food of the most substantial and delicious character. Those pigs which had withstood an ocean voyage for many months were turned adrift to shift for themselves and to live as best they could. The climate, the herbage, the wild berries, the density of the bush, all combined towards rapid reproduction and protection, and as the years rolled along the prediction of Captain Cook came true for the natives were able to hunt the wild pigs for food and sport. The wild hogs of New Zealand are plentiful now in the mountain pastures and the white hunter finds rare sport in pursuing them and adding to his collection boar's tucks of immense size.

Little is known in America of the exact location of New Zealand, and it is very rarely indeed that one will speak correctly of its location, unless perchance one has visited it. An erroneous impression is that it is a part of Australia. This is wrong. It is not a part of that country and is situated 1,250 miles from there, a distance traveled only by sea and requiring three days and three nights when on the fleetest steamers.

New Zealand has a government of its own and one of the best in the world. It is not a part of Australia in any sense of the word, but commercially is

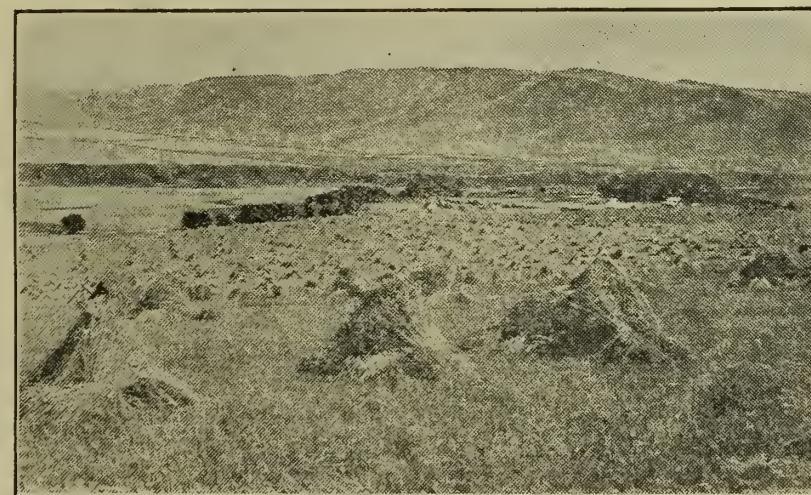
in close touch, as Australia is one of its best customers in buying many of the various products which New Zealand produces in great abundance.

HOW NEW ZEALAND IS REACHED FROM THE UNITED STATES.

New Zealand is divided into three islands, the north, the middle and the south or Stewart Island. It has 3,000 miles of coast line, is about 1,000 miles in length, taking a direct line from

PROPERTY LINES VS. U. S. SURVEY LINES.

EDITOR KANSAS FARMER:—You will greatly oblige me if you will quote the law on a corner-stone controversy in which I am interested. The facts are as follows: Over twenty years ago this section was resurveyed by the county surveyor and the crooked lines straightened with the consent of the owners of the land affected. One half-section corner-stone was lost some time after by being washed under with soil. Another surveyor came to hunt it, but not finding it, he planted another one on a straight line with the two outside-section corners. A schoolhouse was built and a hedge set out on one side of the road, and the road has been worked and used by the public by this second stone since 1887.



Wheatfields, Canterbury, New Zealand.

north to south, contains a trifle over 104,740 square miles and is 5,000 miles due southwest from San Francisco. From this latter port is the direct route to New Zealand from the United States. Steamers sail from San Francisco every twenty-one days and it requires seventeen days to make the journey. The journey is full of interest, as one day en route is passed at Honolulu, and another at Pago-Pago, the first in the Hawaiian, and the second in the Samoan Islands. At these places you obtain an opportunity of seeing the natives in their pristine state, and, again, as they have progressed under the refining influences of Christianity and education.

New Zealand has a population of a trifle less than 1,000,000 of which there are about 40,000 native Maoris. This latter race is thoroughly in touch with the white race and are good citizens. They have their lands, set apart by the Government, and are thoroughly happy and contented.

IMMENSE CROPS ARE RAISED.

The climate of the colony is simply delightful. The temperature averages about 55 in the winter time, and from 65 to 75 in summer. The rainfall is constant, always to be depended upon, with the result that they raise enormous crops and have never known a failure of them. The farmer needs no shelter, no sheds, no protection for his stock. I visited the country in the winter months and saw millions of sheep and cattle grazing in fields which were not only supplying them with food in abundance, but fattening them as well. When farmers desire to hasten the marketable condition of sheep and

(Continued on page 435.)

The first stone, which was lost, has reappeared some time since 1887, but has not been used. Now it is shown by the surveyor's field-notes that this first stone was set in a Government monument, and the second one is 17 feet to one side of it, but is on a straight line and has been used as a corner-stone by the public since 1887. The question that I would like to have answered is this: Does the continuous use by the public since 1887 establish this stone as the legal corner, even though the other one was set on a Government corner and has reappeared and has been present for a number of years? EMIL WERTNER,
Sumner County.

This statement of facts shows a situation that may well give rise to doubt as to the legal aspects of the case. But the fact that the Government marking of the corner in question was lost for a time is of little, if any legal consequence, in regard to the location of that corner, in view of the fact that it was subsequently discovered and conclusively identified. The position of that half-section corner determines the point common to the four quarter-section lines which meet at this corner.

The next question relates to the location of the public road. The road has been used for twenty years where it now is. If this use was with the understanding by the public and by the owners of the adjacent lands that it was not on the section line, there would seem to be little if any doubt of the legal right of the public to continue the use of the road at its present location. But if it be a fact, as it

probably is, that the road is legally described as being along the section line, the further fact that through an error the public used a slightly different route than that regularly established does not probably prevent the owners of lands, thus accidentally used by the public, from insisting that the public desist from such use of their lands and confine travel to the prescribed limits along the section line. This point will be further considered.

The third question and one that is closely connected with the second is as to the ownership of the land. It was agreed among the owners of the land affected to have a resurvey and the line straightened. It is, of course, presumable that all were satisfied and that contingent benefits were sufficient to compensate those who lost a few feet of land for its value. If this agreement had been reduced to writing, had named a valuable consideration, and had been duly recorded, it would be conclusive and would establish the county surveyor's line as the actual line of the properties affected by the agreement. The fact that the parties interested—to say nothing of the general public—have occupied and claimed ownership of these lands according to the agreed lines for more than fifteen years goes far to establish these agreed lines as the true property lines under the Kansas statute of limitations. This statute is contained in chapter 95 of the General Statutes of Kansas. Section 10 of said chapter says: "Actions for the recovery of real property or for determining any adverse right or interest therein can only be brought within the periods hereinafter prescribed after the cause of action shall have accrued, and at no time thereafter." Here follows an enumeration of various causes of action for each of which a limitation varying from two to five years is named. Then follows: "Fourth, An action for the recovery of real property not hereinbefore provided for, within fifteen years."

Under this fourth clause the Supreme Court held in the case of Wood vs. M. K. & T. Railway Co., 11 K. 348: "A mere trespasser without color of right or title, who has been in actual possession of real estate for fifteen years, claiming title thereto, becomes the owner of the property by virtue of the statute of limitations, if the property has been owned during all that time by some individual and not by the United States."

This syllabus is quoted with approval in a decision reported in 52 K. 465. In this later case the court further says:

"To establish an adverse possession, actual, personal, and continuous residence on property is not required, if there are evidences of occupancy at all times, which are open and visible to any one coming there, of such nature that any one would naturally suppose that whoever put them there claimed the land."

There is then little doubt but that the land lines are legally and permanently as they have been recognized by improvements and possession for more than fifteen years.

Returning, now, to the question of the road—the public as well as the land owners have doubtless understood that the road was along the property lines. There have been more or less confused notions as to the variation of the property lines from the section line, but these have had no practical effect upon the use of the road along the property lines instead of along the section lines described in the records. The fact that the road has

been thus practically located along the property lines for more than fifteen years makes the statute of limitations a bar to any action or suit to change the location of the road.

The conclusion, then, is that while the section line is not changed on account of what has occurred as related by our correspondent, but must forever remain where placed by the Government-surveyors, the property lines and the road are actually and permanently as they have been recognized and used for more than fifteen years.

ACCESS TO THE PUBLIC HIGHWAY.

EDITOR KANSAS FARMER:—I am using a road through another party's land in order to reach the traveled highway which is my only way of getting out. Can you tell through THE KANSAS FARMER whether the party owning the land can close this road without warning, and how I should proceed to get a road out in case it should be necessary? This road in question has always been used from this place and for a number of years. R. W. P.

Leavenworth County.

The right to an easement across the land of a neighbor may or may not have been acquired by this correspondent. His statement is not sufficiently explicit when he says: "This road in question has always been used from this place and for a number of years." If a definite road has been continuously used across the neighboring tract for fifteen years by our correspondent and his predecessors in occupancy of the farm he now owns, he has probably a right to such road by "prescription." In any case it is better to talk the matter over with the owner of the land over which the road passes and to come to an understanding if possible. It will be better to pay a reasonable price for a written grant of right to use this road than to go to law about it. But if the owner of the land will not be reasonable, recourse to legal proceedings will in this case be necessary. If the road has been used for fifteen years or more, the owner of the land can be prevented from closing it by injunction. If the road has not been in use for as long as fifteen years and there has been no grant of right-of-way from this correspondent's farm to a public highway, and no agreement can be reached for such right-of-way, it will be necessary to proceed under chapter 112, Laws of 1874, which is included in chapter 154 of the General Statutes of Kansas, beginning at section 39. The expense of proceeding in this way to obtain a road is to be "paid by the person for whose benefit the road is located," as provided in section 41 of said chapter 154.

The law provides a sure method of obtaining the road. It should be used only in case an understanding can not be reached without resort to law.

Our correspondent should call on the nearest justice of the peace or township trustee, either of whom will loan him a copy of the statutes from which he can read the sections herein referred to.

HOME-MADE LIGHTNING-RODS.

EDITOR KANSAS FARMER:—Could you through your paper give a description of how to construct and put up a cheap but effective lightning-rod to be used expressly for stables and out-buildings? I want one that I could put up myself and made of common wire.

McPherson County. J. I. ANDERSON.

The cable-copper rods are probably the best. If one desires to put up a rod without the assistance of a lightning-rod man, he may buy at a hardware store three-quarter-inch round iron of sufficient length; take it to the blacksmith and have the pieces welded into one continuous rod; have three or four fairly sharp prongs welded on at and near the top; drag it home behind the wagon and erect it. Before erecting he should make a hole in the ground for the lower end of the rod. This lower end should be placed deep enough to be in earth that is always moist. If it reaches to permanent water, so much the better. The rod may be attached in any manner to the building for support. It should extend well above the highest point of the building. If the building is very long, it may be better to erect a rod at either end. Such a rod will last for many years if made of iron; if made of steel it may rust off at the ground, leaving the building quite as much exposed as if no rod were used.

Another way to make a "rod" that will be good while it lasts is to twist together several strands of galvanized wire; cut all loops at the end that is to become the top and separate them slightly. Erect and support as above suggested for the iron rod. An advantage of the wire "rod" is found in its

capability of being bent to conform to the surface upon which it is to be placed. Unless the wire is heavily galvanized it will rust off at the ground within a few years and must then be renewed. The resting may be considerably retarded in both the iron and the wire rods by carefully coating with asphalt, especially where the soil comes in contact with the metal.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year, and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

Mrs. Florence Shaw Kellogg, of Fay, Russell County, Kansas, is writing for publication a series of articles on Mother Bickerdyke whom so many of the old soldiers have reason to remember with gratitude. Mrs. Kellogg would be greatly helped in her labor of love if she could have for a brief time the letters which so many of the old soldiers have from Mother Bickerdyke. Any such entrusted to Mrs. Kellogg's care will be scrupulously preserved and carefully returned.

Miscellany

The Agricultural College Y. M. C. A. Building Funds.

EDITOR KANSAS FARMER:—Much interest is being shown by the students of the Agricultural College in the canvass which is being carried on by the three leading farm papers of Kansas. Naturally this would be so when it is understood that the students themselves have subscribed about eleven thousand dollars to the fund. The students from each county are being organized into groups which meet and talk over plans for interesting the people of their respective counties. The various county papers are requested to call the attention of their readers to the canvass, and in addition many personal letters are being sent out by the students, appealing to their friends to take some part in this movement. If the people all over the State could only see things the way the students do, there would be no trouble whatever in raising the money.

Last spring one of the young men made a pledge of \$75 to the fund. He immediately set about earning this. To save expenses he stopped eating at the club and began to batch. Then he got work at the college barn, putting in seven or eight hours a day besides carrying on his regular work at college making a passing grade in all of his studies. About a month ago this student came around with the last of his \$75. He not only had made all of his expenses, but had saved \$75 in addition for the Y. M. C. A. building.

This student is only one of many who are sacrificing their time and money to the cause which means so much to the students. The most of the students who have given heavily will reap no direct benefits from their sacrifices inasmuch as they will have graduated by the time the building is erected. Of the thirty-six who subscribed \$100 each, only two or three are now in college. The others have felt the need of a building and are unwilling that the thousands of future students should have to do without the advantages that this building would certainly bring.

W. W. MCLEAN, Gen. Sec.

The following letter from Mr. James Dukelow, a prominent fruit-grower, of Hutchinson, explains itself:

"Mr. W. W. McLean.

"Dear Sir:—Having seen your appeal in THE KANSAS FARMER to the farmers and citizens of our great State for funds to build a Young Men's Christian Association building at Manhattan, I beg to say that I know of no more worthy object. When I visited the college some time since and saw the crowds of young men and young women come together from the four corners of the State away from their homes, I thought what an opportunity to make Christian citizens of this coming generation, yes, and generations to come.

"I hope that my fellow citizens of

Kansas will take this opportunity to let the country at large see that they value what is Christ-like, and that our young people seeking a secular education will be also supplied with a spiritual education, which will fit them not only to be citizens of our great State, but will also fit them to be citizens of Heaven. Please find enclosed check for \$100."

The subscriptions now stand as follows:

Previously acknowledged.....	\$22,632.00
Jacob D. Lefebure, Havensville, Pottawatomie Co.	1.00
"Friend," Riley Co.	15.00
James Dukelow, Hutchinson, Reno Co.	100.00
G. C. Smith, Ottawa, Kans.	1.00
Bemis Bag Co., Kansas City, Mo.	5.00
W. Fryhofer, Randolph, Kans.	5.00
"Cash," Sibley, Kans.	1.00
Mrs. & Mrs. T. F. Little, Emporia, Kans.	1.00

State Sunday School Convention.

The 41st annual convention of the Kansas State Sunday School Association will be held at Lawrence, Tuesday, Wednesday, and Thursday, May 1, 2, and 3, 1906. The railroads have announced a rate for the round trip of one fare plus fifty cents. Entertainment in the best homes of the city at a dollar a day, or fifty cents for lodging and breakfast. Every Sunday School in Kansas is entitled to a delegate. Pastors and superintendents are delegates ex officio. Persons desiring appointment as delegates may secure it by applying to the officers of the county or State Association. Last year over 1,200 delegates from 94 counties constituted the Hutchinson convention. A greater number is expected at Lawrence in May.

General Secretary Marion Lawrence, of Toledo, Ohio, Prof. D. B. Towner, of Chicago, Prof. E. P. St. John, of Hartford, Conn., and Rev. W. Gardner Thralla, of Freeport, Ill., will be in attendance throughout.

There will be twin meetings at night. Special conferences are planned for elementary teachers, for county secretaries, for pastors, and for teachers of adults. A session in the State University Chapel and a visit to Haskell Institute are in prospect.

For programs and further information address, J. H. Engle, General Secretary, Abilene, Kans.

Articles Concerning Labor.

EDITOR KANSAS FARMER:—Would be very much pleased if you would refer or send me articles concerning the labor unions.

MILES REGMER.

Kay County, Oklahoma.

Write to the Commissioner of Labor, Washington, D. C.

The tea used in the immediate household of the Emperor of China is treated with the utmost care. It is raised in a garden surrounded by a wall, so that neither man nor beast can get anywhere near the plants. At the time of the harvest those collecting these leaves must abstain from eating fish, that their breath may not spoil the aroma of the tea; they must bathe three times a day, and, in addition, must wear gloves while picking the tea for the Chinese court.

Table of Contents

Auburn grange.....	443
Bees, transfer to modern hives.....	447
Blood, eat raisins to purify the.....	440
Cane vs. green manure.....	444
Chicks, indigestion in.....	448
Dairy cow, the profitable.....	446
Equity grange.....	443
Feather-eating fowls.....	448
Fertilizers, experiments with chemical.....	444
Fleetfoot, the autobiography of a pony.....	441
Garden in a day, don't make.....	445
Housecleaning.....	440
Household notes.....	440
Kansas day.....	443
Labor, articles concerning.....	434
Lice on chicks.....	448
Lightning rods, home-made.....	434
Lousy live stock.....	438
Madison Taka Embroidery Club.....	443
New Zealand a land of peace and plenty.....	433
Once upon a time (poem).....	442
Oracle, the (poem).....	441
Poultry notes.....	449
Poultry pointers.....	448
Property lines vs. U. S. survey lines.....	433
Public highway, access to the.....	434
Recipes, tested.....	440
Seed-corn, pure-bred.....	444
Ships that never came back (poem).....	440
Spring airing, a (poem).....	442
State turkeys.....	448
Sub-packing, importance of.....	444
Wea grange.....	443
Woman still, she is the same.....	440
Woman's work.....	443
Y. M. C. A. building fund.....	434

WET?
No doubt you'll need a
TOWER'S
FISH BRAND
SUIT or SLICKER

this season.
Make no mistake—it's the kind
that's guaranteed to keep you dry
and comfortable in the hardest
storm. Made in Black or Yellow.
Sold by all reliable dealers.

A. J. TOWER CO.,
BOSTON, U.S.A.
TOWER CANADIAN CO., LTD.
Toronto, Can.

BOOK FREE **FARM TELEPHONES!** How to put them in place
what they cost—why they save you money
all information and valuable book free.
Write J. Andrus & Sons, 823 W. Water St., Milwaukee, Wis.

FENCE STRONGEST
MADE, Bull strong chick
en-tight. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalog free.
COILED SPRING FENCE CO., Box 255, Winchester, Indiana.

LAWN FENCE
Made of Steel. Lasts a lifetime.
We have no Agents. Sold to users at Wholesale Prices.
7 cts. a foot up. Cheaper than wood. Catalogue Free.
KITSELMAN BROTHERS, Box 399, Muncie, Indiana.

IWAN'S POST HOLE AUGER
Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Three times the work accomplished with an Iwan Auger than with any other. Makes hole smoothly and quickly; empties easily; is very durable. Used by U. S. Govt. 8, 4, 6, 6, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$6.00; 14 inch, \$7.50. Sample at special price to introduce. Agents Wanted. Inquire of dealers or write direct for particulars. **IWAN BROS.**, Dept. No. 1, Streator, Ill.

\$10.00 Sweep Feed Grinder | **\$14.00 Galvanized Steel Wind Mill**
We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

CEMENT FENCE POST or Building Blocks WITH THE
CROUCH \$10 MACHINE
Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.
Ellsworth Crouch, Oakland, Kansas.

\$41.00 Split Hickory
Top Buggy, made to order, guaranteed 2 years; sold on 30 days Free Trial. Tell us the style vehicle you want. 1906 catalog, 100 styles, FREE. Send today.
The Ohio Carriage Mfg. Co., H. C. Phelps, Pres., Station 231, Cincinnati, O.

SCALES ALL STYLES LOWEST PRICES
30 DAYS FREE TRIAL
PITLESS CATALOGUE FREE
AMERICAN SCALE CO., 304 FIDELITY TRUST BLDG., KANSAS CITY, MO

THE CENTURY GRADER
20TH
Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks; Levels Land for Irrigation, Cuts Ditches, Cleanse Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled. Descriptive Catalogue FREE.
THE WHITE CITY GRADER CO., Box F-7, WHITE CITY, KAN.

Modern Silage Methods!
That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't find a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.
SILVER MFG. CO., Salem, Ohio.

New Zealand a Land of Peace and Plenty.

(Continued from page 433.)

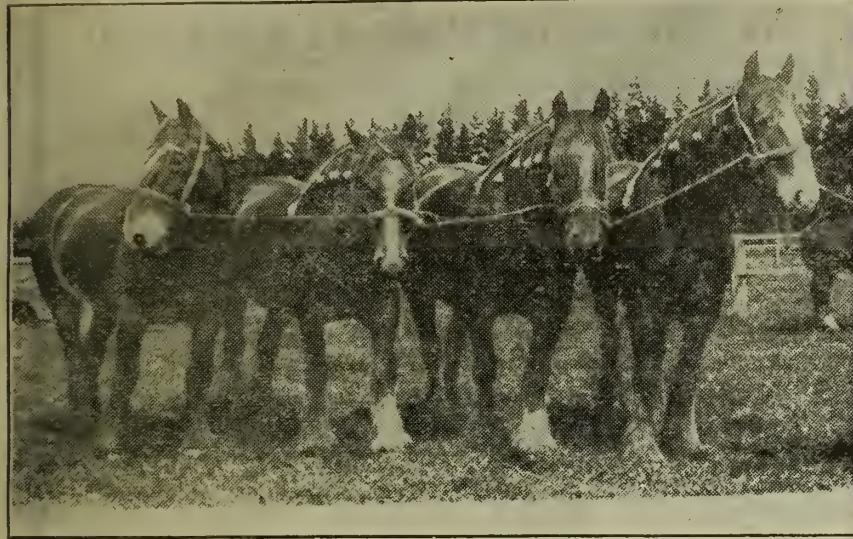
cattle they feed them turnips and mangels. I saw fields of turnips which their owners informed me would average 60 tons to the acre, and mangels which would average 90 tons. The New Zealand farmer does not speak of his turnips and mangels by the bushel, he invariably says they will run so many tons to the acre. It is nothing uncommon for farmers to raise three crops of potatoes on the same piece of ground in one year.

THE DAIRY INDUSTRY.

The dairy industry is advancing rap-

ing now being carried on by the Government brings the dairy products up to the highest standard. A full staff of instructors and graders are kept constantly employed throughout the year and now all dairy produce is graded by department officers before export. A lady instructor has recently been appointed for the purpose of visiting the various private farms throughout the colony and instructing the farmers' wives and daughters how to make up-to-date butter.

Upon visiting the factories I found everything scrupulously clean and everything conducted in a thorough business manner. American machinery is much in favor, and I saw familiar



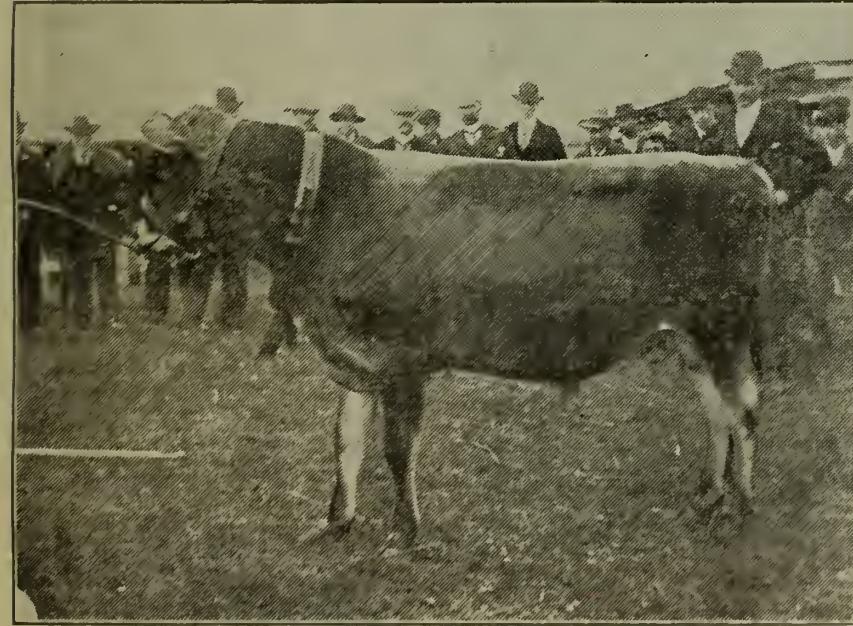
First-Prize Team of Geldings Hawker Bay Show, New Zealand.

idly and is now one of the most important. Its inception was crude, as new beginnings usually are, but the Government foresaw its importance, how it would add to the success and happiness of the people, how it would add to the wealth and prosperity of the nation, and has encouraged its advancement in every way. The dairy exports during the past year are as stated hereafter in this letter, but it is only beginning. The Government has passed laws for dairy inspection and grading, has introduced modern methods of skimming and caring for the milk, advances money on certain conditions for the establishment of creameries, and is doing everything possible to promote, to increase, and aid an industry where nature is doing her part from one year's end to an-

separators and other modern conveniences and necessities in these factories.

A WONDERFUL GRAZING COUNTRY.

New Zealand is a magnificent grazing country, undoubtedly the best in the world. During my travels I noticed many more sheep than cattle. This is accounted for from the fact that sheep-raising is more profitable. The demand is always great for lamb and mutton. New Zealand lambs bring the highest price of any in the London market, and the supply never exceeds the demand. The market is not always so good for cattle. The cattle raised in the colony are Shorthorns, Herefords, Angus, Ayrshire, and Jersey. Of the pure breeds there are more Shorthorns than all others combined, and about twelve times as many



Dairy Stock, Palmerston Show, New Zealand.

other. When you consider the fact that dairy stock requires but little feeding other than it gets from grazing, that fattening food grows tons to the acre, that no torrid suns, no winter storms or cold retard the condition of the dairy cow, but that year in and year out the sun shines, the rain falls, the grass grows, and she eats until her heart is content, and then lies down, complacently chews her cud, and if capable of philosophizing, says to herself, "What a happy bovine am I; plenty to eat, plenty to drink, and nothing to do but eat and rest."

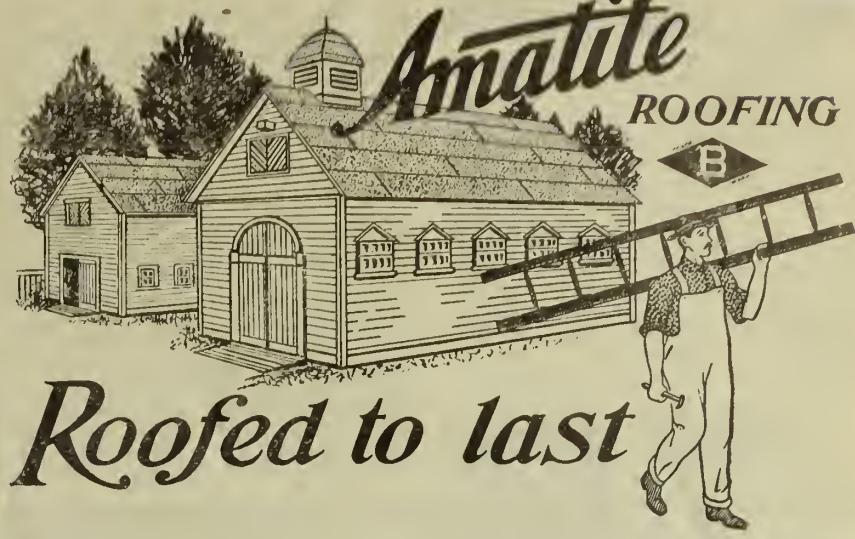
And consider too the condition of the dairyman. No frozen feet or hands, no stall feeding, no stable cares, but he milks his cows in the open air where birds, whether in summer or winter, are singing in the tree-tops and the hedgerows where the foliage is constantly green.

The system of instruction and grad-

crosses as all the pure breeds. At the end of the year 1904 there were 1,593,547 cattle in the colony.

The dairy interest is greater in the north than in the middle island, while the grain products are much larger in the middle than in the north. The equator is crossed in going from San Francisco to New Zealand and an apparent transposition of nature is seen. That is, the farther south you go the colder it becomes. The north island of New Zealand, therefore, is warmer than the south. Its soil is volcanic and many tropical fruits will grow there which would be destroyed by frost farther south. In the north island, or Auckland district, apples, peaches, pears, apricots, oranges, lemons, grapes, and all the products of the temperate zone will grow in great abundance. It is an excellent district for grape-growing.

The fruit industry receives highly



WALK AWAY when the job is done and forget about your roofs for years. Amatite will do its duty winter and summer, year after year, without any attention or coating or painting. Amatite is self-reliant.

Whatever may have been your experience in the past with ready roofs, we now offer one that will stand **every test**. What we want you to do, is to try Amatite.

Cover a small building with it. The cost is very little. We are confident you will find it beyond question the **best roof covering** that has ever come under your notice.

When we say that Amatite is **water-proof**, we mean just that precisely.

Water can not get through Amatite, and if you follow the very simple directions for laying, you will have dry, warm and comfortable buildings for many years.

It is proof against climatic changes. The hot rays of the sun,

and the severest cold have no effect upon it. It is simply the best defense against the elements made.

If you want to know anything further about Amatite write to-day for our booklet. We have made quite an interesting story of the origin of Amatite and its history up to date, and we will be glad to send this book free with Sample, to any one interested in the roofing subject.

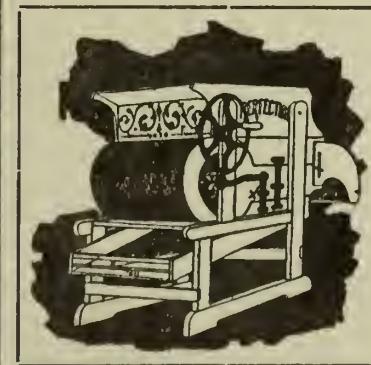
When you get the sample, don't glance it over, and throw it away. Subject it to the same tests that a roof would be likely to receive—it will come through all right—but we want you to prove it yourself.

Get the sample at once. A line to any of the offices mentioned below will bring it by return mail.

Barrett Manufacturing Co., New York, Chicago, Cleveland, Boston, Allegheny, St. Louis, Minneapolis, Philadelphia, Cincinnati, New Orleans, Kansas City.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "**Perfection**" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: :



A "**Perfection**" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.
305 C KANSAS AVENUE, TOPEKA, KANSAS.

Buy Fence Direct.

from the factory. It is the most satisfactory and most economical method of buying. Most economical because, in buying direct, you cut out all unnecessary handling and all profits of go-betweens. This makes quite a saving.

Most satisfactory because you have so much larger a line to select from. We make 26 styles and heights of fence besides gates and stretchers.

The **Continuous Stay** gives Advance Fence its superior strength. It preserves and utilizes all the strength of the wire, about half of which is wasted in fences with ent stays.

30 Days' Free Trial. If after receiving our fence you do not like it you can return it to us at our expense and your money will be refunded.

We Pay Freight to any steam R. R. station in the U. S. on 40 rods or more and guarantee safe delivery.

Write today for our Free Fence Book and wholesale delivered prices.

ADVANCE FENCE CO.
3778 Old Street Peoria, Ill.



Kansas City Hay Press Co., 129 Mill Street, Kansas City, Mo.

successful help from the horticultural and biological division. Pomologists are constantly traveling in fruit-raising localities, advising fruit-growers and farmers generally as to fruit-growing and demonstrating by practical methods and experiments the best ways to be successful. A number of commercial orchards have been established on modern lines and numerous canning factories are springing up in various places throughout the colony. The American fruit-grower with his practical knowledge of horticulture would without doubt be successful in the Auckland district. I could see wonderful opportunities there for those who understand fruit-culture.

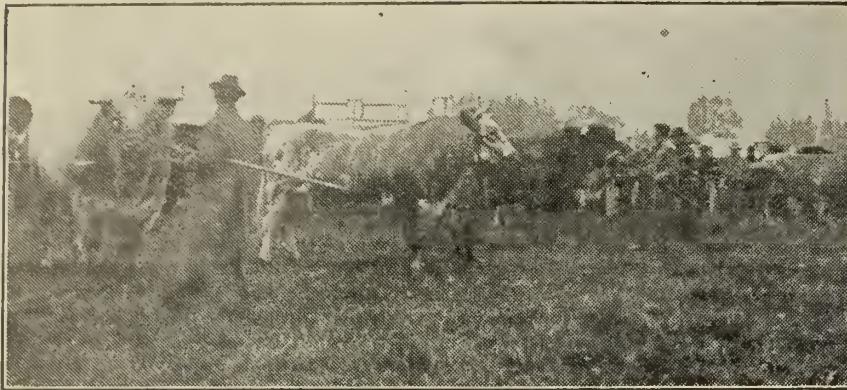
WHERE THEY RAISE GRAIN.

The grain belt of the colony is on the Canterbury plains in the middle island. The plains are 50 miles wide and 150

and they are usually through in January. The greater part of the shearing is done by hand, although clipping-machines are rapidly coming into use. The weight of the fleece runs from 6 to 11 pounds per sheep; and the shearers receive from \$3.75 to \$5.00 per 100 sheep and board.

COMPULSORY EDUCATION.

The laws of New Zealand are attracting world-wide attention. I had an opportunity to see them in their practical working and the effect they produced throughout the islands. The foundation of these laws and the faithful observance of them, I was told, could be seen in the homes of all the people, where the mother's love and her advice were the guiding star of New Zealand's present and future manhood. Example is much; it directs the youth to the straight and narrow path of



Judging Shorthorns, Hawker Bay Show, New Zealand.

long. This section is one of the greatest grain producers per acre in the world. The principal city on these plains is Christchurch, of 60,000 inhabitants, a modern city in every respect, with electric lights and gas, street-car lines, and very beautifully laid out. It has been selected as the city wherein the International Exhibition, beginning November, 1906, and lasting six months, will be held. New Zealanders take great pride in this forthcoming exhibition and claim they will surprise older worlds in the wealth of resources they will show. Foreign countries are very much interested in it, and space for exhibits has been taken by manufacturers in Great Britain, France, Germany, Russia, Norway, China, Japan, Canada, United States, Australia, and India.

The flax or hemp industry of the colony is very important. Flax grows mostly on swampy ground, although found on hill sides. It grows both in a wild and a cultivated state. It is sorted and graded under Government inspection. The exports for the year past were \$3,654,115 in value.

Kauri gum is also of great importance. This gum is found only in the north Island, under the surface of the earth where it has lain for years. It is used in the manufacture of varnish. Its export value amounts to about \$6,000,000 annually and ten thousand gum-diggers are constantly employed searching for it.

SHEEP THE LEADING INDUSTRY.

Sheep-raising is carried on more extensively in New Zealand than perhaps in any other country in the world. The large grazing farms are designated as "stations," and in New Zealand to have it said of a man that he owns a "station" means that he is a man of much wealth.

During the year 1905 there were 104 of these large station-owners, who owned more than 20,000 sheep each. The balance of the 20,000,000 sheep were owned by 18,390 persons, who possessed sheep from a few hundred to several thousand. The principal breeds are Lincoln, Romney, and Leicester, with a few Shropshires and Southdowns to breed lambs for the English market. There are only 70,000 merinos in the colony and no American merinos. There are scarcely any herders in an American sense, all the sheep are practically fenced in and they need no especial attention other than during lambing season. The sheep-herders receive from \$25 to \$35 per month and board, and a very easy time they have of it. The great bulk of the sheep are fed on English-cultivated grasses, and a large percentage are fattened on rape, turnips, mangels, etc. Scarcely any grain is fed them. August, September, and October are the months for lambing.

When I passed through the colony during the months of August and September last I saw hundreds of lambs from a few hours to a few weeks old, rotting beside their dams or lying contentedly on the green grass.

Shearing time begins in November,

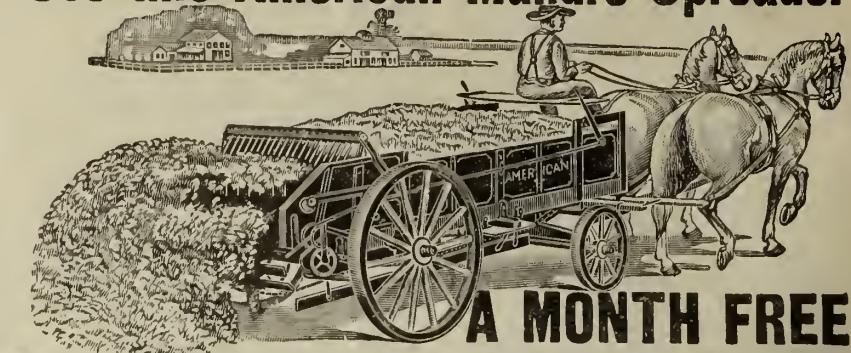
right, or to that broad road of years of wrong-doing. The New Zealand mother is educated; she is refined. Inheritance has done much for her but education has done more, and it is what is building up the nation and will supply its brains for all time to come. Illiteracy is not known among those born and raised in the colony. Compulsory education is a law, and all children are forced to obey it. Pupils must begin attending school at the age of seven and continue until the age of fourteen unless prior to that time they are able to pass the fourth grade. This fourth grade when passed is equivalent to being prepared for the high school in America. There is no way for children to avoid going to school if they are physically able to. Even their parents are not depended upon to keep them in school, but their absence is attended to by an officer whose duty it is to look after truants, and he does it most effectually. When you consider that most of the people of the colony attend these schools and many of them continue through New Zealand colleges equal to our own, it is no wonder that statistics show that there is less illiteracy in the islands on New Zealand than any other country in the world. No child can obtain employment in any store, factory, or other place, unless he or she has attained the age of fourteen years, and by teacher's certificate can show that he or she has passed the fourth-standard grade in school.

THE GOVERNMENT ASSISTS SETTLERS TO OWN A FARM.

The New Zealand government has several millions acres of land open for settlement, suitable for agricultural purposes. In order to get the right kind of people, English-speaking farmers, to occupy and develop these lands, the Government passed the Advance to Settlers Act. Under this law the Government sells lands to farmers from other countries and assists them by loaning them money equal to three-fifths of the amount they invest in the land. As an illustration, if an American farmer should go to New Zealand with the intention of living there and engaging in farming, they would sell him land suitable for farming purposes and, if he had \$5,000 to invest in lands, the Government would loan him three-fifths, or \$3,000, for improvement purposes, at five per cent interest per annum and on five years time. Of course, a larger or smaller amount would be loaned dependent upon the investment. The Government has loaned twenty-two millions of dollars in this way. The Premier told me that owing to the great prosperity of the country and the absolute surety of continuous good crops, the farmers soon pay off their loans.

The Government aids the settler in another way. The settler buys a parcel of wild bush land, as much as he can pay for at a few dollars per acre. The Government makes it a part of the contract that their deal must be reciprocal. He must work three days each

Use this American Manure Spreader



A MONTH FREE

TO PROVE ALL THE CLAIMS WE MAKE FOR IT

We sell direct to you because we do not belong to any Trust or Combination.

And by our plan of making and selling direct, you get a dollar's worth of Manure Spreader for every dollar you pay.

You see we make more Manure Spreaders than any other concern in the world.

We own and operate the largest factory ever built for this purpose.

It is equipped with every modern labor-saving device. All our machinery is up-to-date—the very "latest improved".

This means the best possible machines at the lowest possible cost.

The American Manure Spreader is today an example of the very highest development in modern agricultural implements.

It is absolutely up-to-date. The principles upon which it is constructed are sensible and practical.

There are no complicated parts to get out of order. It is simple, and carefully constructed.

And you take as much time as you require to pay for the Spreader after you have used it **A MONTH FREE**.

The Spreader may earn its own cost, before you send us a shilling.

Will you be as fair with us as we are willing to be with you?

Will you send for information of our generous proposition today?

Even though you do not wish to buy now, send for particulars.

Some day you may wish to buy, and then knowledge of our New Selling Plan will come in handy. You will know how to save money.

If you will tell us how much land you own, and how many horses, cattle, sheep and hogs you keep, we will give you the Government statistics as to the value of your manure crop.

Write to us today. Put down this paper and write before the matter has a chance to slip your memory.

Address at once—

AMERICAN HARROW CO. 10133 Hastings St. Detroit, Mich.

Copyright, 1906, by Dodd & Struthers.



Seventy-five per cent of the damage done to farm buildings is caused by lightning, but not a loss where our rods are used.

Our rods protect you because they are made of pure copper, are put on in a continuous strand; no joints nor weak spots, and all our agents are taught by us how they should be erected.

Teaching these agents keeps thirty-four traveling men busy, but it pays, for it enables us to give an absolute guarantee with every job.

When we teach a man how to erect our rods we give him an Agents Certificate which says that he is competent to rod your house and authorize him to issue our Written Guarantee.

Make the agent show you his certificate and see that our trade mark is burned on the end of the spool, for when it comes to protection from lightning you want the best and not a cheap imitation.

Write for our free booklet, "The Laws and Nature of Lightning and How to Control It."

Yours very truly,



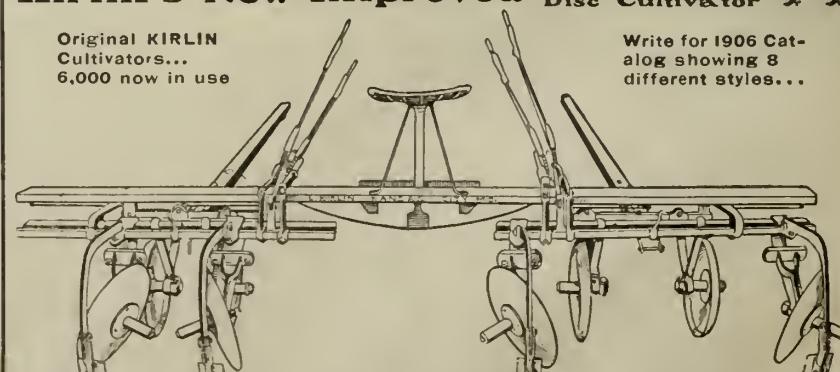
DODD & STRUTHERS
DES MOINES, IOWA



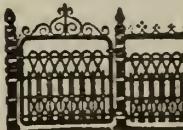
Kirlin's New Improved Double Lever Tongue Disc Cultivator

Original KIRLIN
Cultivators...
6,000 now in use

Write for 1906 Catalog showing 8
different styles...



L. KIRLIN, 1208 UNION AVENUE, KANSAS CITY MO.



YARD FENCE HANDSOME, STRONG AND DURABLE.
Almost as cheap as wood and lasts ten times longer. Sold direct to consumers on thirty days trial. Write for catalogue.

The Farmers' Fence Co.
MELVERN, KANSAS
Box 36.

You can lay it yourself

Congo Roofing

When you get a ready roofing that has all the good qualities of pure rubber and none of the bad, and outlasts it ten times over, besides being waterproof, climate proof, acid and alkali proof, you have just about a perfect roof covering—that's Congo.

It's more than worth the trouble to write to-day for free Sample and Booklet.

BUCHANAN-FOSTER COMPANY
448 Chestnut, Philadelphia, Pa.

PAROID

Before you buy roofing for any building, from a small poultry house to the largest mill or factory, it will pay you to get samples and complete proofs of quality from the oldest makers of ready roofing in America. (We originated the roll of roofing ready to lay with fixtures packed in the center.) Our concern was

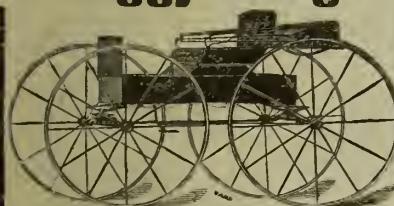
Founded in 1817

We can show you why "Paroid" is the best of them all—lasts longer and saves most in repairs. Drop us a postal to-day.

F. W. BIRD & SON,

New York, Washington, Chicago,
Hamilton, Ont.

ROOFING A Buggy Bargain



Buy it on a Plan so You Know You Have a Bargain
WE PAY THE FREIGHT.

You deal with the factory. 30 Days Trial. You can test its quality for yourself and see that its price is about half the local dealers' price.

GUARANTEED TWO YEARS

We insure you against any loss if a flaw develops in either workmanship or material within that time. Do you want a vehicle of that kind sold that way? Anything you need in vehicle line on just that plan. Send today for manufacturers' catalog. Address Dept. D

The Apex Mfg. Co., Bloomington, Ill.

Before you buy that Manure Spreader

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader
has all those important features and many others equally as important. Write to-day for free catalog and special prices and terms.

APPLETON MANUFACTURING CO.,
19 Fargo Street, Batavia, Ill. U. S. A.

More Money Made as Local Agent

**FOR FARMERS FIVE
YEAR ACCOUNT-BOOKS**

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N. Y.

week clearing his land, and the other three days he must work for the Government on the public roads in the vicinity. For the work done for the Government he receives \$2 a day, if a single man. In this way he helps make good roads, these roads enhance the value of his lands, and he gets sufficient cash each week to keep him in provisions. If a man of family he gets \$2.50 and gets his pay every Saturday night. This law is doing a wonderful good in the colony. It is converting wild lands into prosperous farms, building good roads, and enabling settlers to own good farms within a few years after they reach the colony.

LAND FOR SETTLEMENT.

The Government has open for settlement about 8,000,000 acres of land. It is desired that these lands be settled upon by English-speaking, practical farmers, men who will be a credit to the country and upbuild it as a nation. There are at this writing a trifle less than 1,000,000 people in New Zealand, of which about 40,000 are Maoris or natives. There is plenty of room for 4,000,000 people in the colony, but the newcomers should be agriculturists to engage in general or special farming, in sheep- and cattle-raising, in dairy-farming and in fruit-culture. The Government is extending the right hand of welcome to such people and offers them cooperation in good lands at low prices, low rates for the shipment of their products, the assistance of experimental farms, free-grading inspection, free service of breeding sires, etc., and lest the lands should be taken too quickly they impress an absentee tax on non-residents equal to double that paid by those living in the colony and can, by law, appraise and buy for subdivision and settlement such of the enormous "stations" or immense farms as are necessary to provide lands for incoming settlers at reasonable prices.

The tariff has been removed and all agricultural and farm implements and apparatus used for daily purposes are received free of duty from the United States, Great Britain, and Canada.

THE WEALTH OF THE COLONY.

The population of the Colony is slightly less than 1,000,000, and the average wealth is \$1,498 for each person, the highest in the world. The wealth and prosperity of the country is shown in savings deposits. At the end of the year 1905 there were 276,066 depositors in the Government savings banks and they had a total credit balance of \$43,331,338. When you stop to consider that in a country with less than 1,000,000 population almost one in every three has money on deposit in a bank, it shows how prosperous that country is.

New Zealand is rich in agriculture,

Christchurch are located at the verge of magnificent harbors. Christchurch is an inland city and Lyttelton, four miles distant, is its seaport. The cities are modern in every respect, have gas, electric lights, street-cars, colleges, large and expensive public buildings, etc.

LAWS PREVENT STRIKES.

There are many laws in New Zealand which add to the welfare of the people. The Conciliation and Arbitration Act absolutely prevents strikes. The Old Age Pension Act cares for men and women in their declining years. What is known as the Free Breakfast Table lessens the cost of living by removing the tariff on many of the necessities of life. The Government assists the worker to build and own his home. The Government has a penny postage. It owns and controls the telegraph and telephone systems and makes very low rates. It owns the railroads and carries passengers and freight at rates satisfactory to the general public. It is a Government representing all the people that they may prosper and be thoroughly contented and happy, with their cost of living reduced to the lowest possible degree.

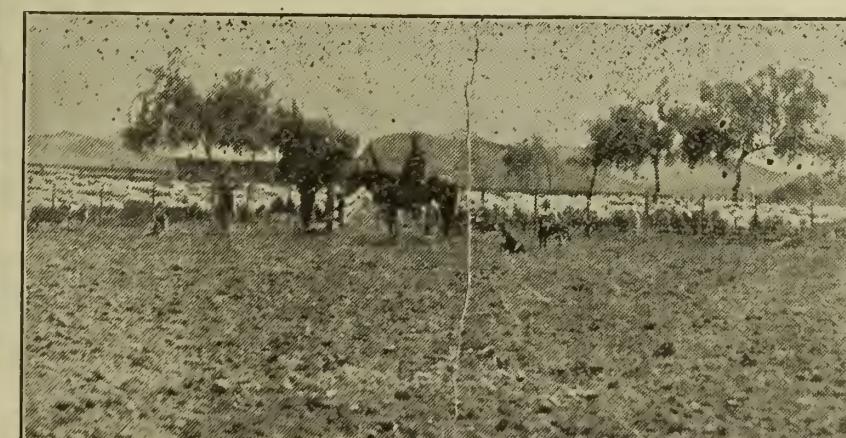
ALL PEOPLE ARE HEALTHY.

Living in a land where nature has showered so many blessings, where torrid heat and blizzards are unknown, where the climate is always tempered by ocean winds, it is not surprising that New Zealand has the lowest death rate of any country in the world. The people virtually live out of doors and I never saw so many healthy and rosy-cheeked little ones as I saw in New Zealand, barefooted in the middle of their winter, which was very much like our October weather.

THE CHARACTER OF THE PEOPLE.

New Zealand is populated with an English-speaking class, industrious, progressive, and educated. The people are courteous and hospitable. They admire Americans. They like the hustle which is found necessary for an existence in this country, and when I asked many of them if they would like to have farmers from the United States come and settle among them, they, without exception, paid the highest compliments to our farmers, and said they would gladly welcome them as neighbors and friends in a land where the climate is always mild, where strikes are not permitted, where drought and failure of crops are unknown.

The Kirlin Disc cultivators advertised on page 436 of this issue of THE KANSAS FARMER, are Kansas machines made by a Kansas man. Mr. Kirlin lived many years in Kansas and knows her needs and the conditions un-



A Few Ewes and Lambs, New Zealand.

and its temperate climate enables stock to forage on green vegetation through the year. Enormous crops are raised of wheat, oats, barley, turnips, and mangels. The values of exports during the past year were: Wool, \$26,900,965, gold (about) \$10,000,000, hemp, \$3,654,015, and butter over \$8,000,000. About 3,500,000 carcasses of frozen mutton and lamb are shipped annually. There are fully 20,000,000 sheep grazing on the islands at the present time. There seems to be a scarcity of herdsmen or shepherds and young men are in demand at all times. There is a special demand for men who understand milking and looking after cattle and a general knowledge of farming; such men can always find profitable employment.

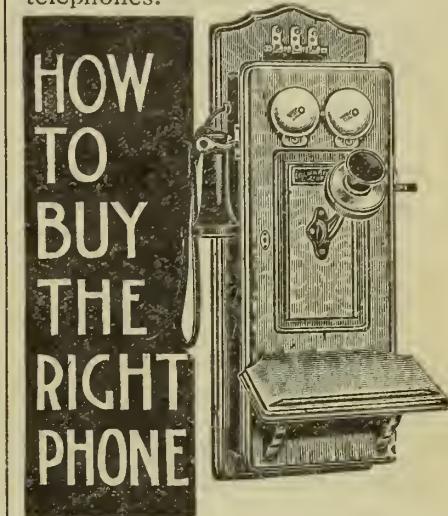
THE CITIES OF NEW ZEALAND.

Auckland is the largest city with 67,000 inhabitants, Christchurch second with 60,000, and Wellington and Dunedin have more than 50,000 each. There are many other very prosperous cities ranging from 5,000 to 10,000. The larger cities with the exception of

which farming is practiced here. With this thorough knowledge and with a large experience and inventive skill, he has been able to place before the farmers of the West one of the most perfect machines yet offered them. In these latter days when it is so difficult to secure farm help, the farmer must depend upon machinery to do his work. The new catalogues lately issued by Mr. Kirlin shows many styles of disc cultivators and lists equipped with the new magazine dust-proof disc-hub and the open disc for cultivating corn the second time when desired. Twelve years of use in the field is the best possible guarantee of the value of this line of farm tools. They are just the tools needed for preparing wheat ground, the cultivation of corn or other sown crops, and the killing of weeds. Write to Mr. Kirlin, 1208 Union Avenue, Kansas City, Mo., and you will get one of these catalogues free if you mention THE KANSAS FARMER.

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

C Every farmer knows the value of a farm telephone, but he is not in a position to know which is the best phone to buy. It's a good deal like buying a watch. The outward appearance of all telephones are very similar. But how about the works inside? That's the part you want to know all about before you buy. We have published a book about telephones.



C It tells "How to Buy the Right Phone." This book tells the reasons why the "EACO" phones have clearer, stronger talking qualities than others. It tells why "EACO" phones are better adapted to the use of farmer's than others. It tells how to organize a Farmer's Telephone Company and how to build a practical efficient working line that will be a source of pleasure and profit every day in the year.

C "EACO" phones are the favorite farmer's telephone because they are made handsome, strong and durable. Subscribers can be called up whether the receiver is on the hook or not, provided all the phones are fitted with our X. P. Condensers. "EACO" farm phones are especially made for heavy work on crowded lines and aside from being substantially made, are low in price. Get our book mentioned above and read how to start and build a farm line. Telephones are a necessity to every farmer, and every live farmer is getting in line as fast as possible. Write today.

ELECTRIC APPLIANCE COMPANY

Dept. P Chicago, Ill.



Better Barn Roofing

There is no building around your premises that requires a better roofing than your barn. On the quality of its roof depends the protection of your stock, grain, feed, machinery, etc., which is of vital interest to you. One leak during a heavy rain is liable to cause more damage than a new roof of BEACON-ITE would cost.

When you put a new roofing on your barn, why not use a material that will not leak? BEACON-ITE LONG LIFE ROOFING is made of materials that make it absolutely water-tight. Isn't this the kind of roofing you want for all of your buildings, one that you will not have to patch after every rain?

About the cost: BEACON-ITE is the only roofing you can buy direct from the mills; thereby saving the dealers' profit. We pay all the freight charges.

Write to-day for FREE samples of this water proof roofing and our wholesale prices. Then judge for yourself.

BEACON-ITE MILLS, 1106 N. 2nd Street, St. Louis

You Can Thresh

at your convenience, when the grain is ready and save stacking, save help and save grain if you use a

BELLO CITY SMALL THRESHER.

Good capacity, light, compact, durable, cleans all grain and seeds equal to any. No experts needed. Low in price. Fully guaranteed. Write at once.

Bello City Mfg. Co., Racine, Wisconsin.
Box 78.



When writing our advertisers please mention this paper.

Horse Owners! Use GOMBAULT'S Caustic Balsam



A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches & Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

April 25, 1906—Shorthorns at Manhattan, Kans.

F. M. Gifford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, Des Moines, Iowa, Manager.

October 2-3-4, 1906—Glascow Live Stock Association sale of pure-bred stock, Glascow, Kans.

October 17, 1906—Poland-Chinas, W. A. Pruitt, Asherville, Kans.

October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.

October 20, 1906—W. R. Dawling, Norcurt, Kans.

Poland-Chinas.

October 24, 1906—Poland-Chinas, Frank A. Dawley, Waldo, Kans.

October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.

December 4, 1906—Poland-Chinas, Limon Ford, Minneapolis, Kans.

Treatment of Lousy Live Stock.

R. A. CRAIG, VETERINARIAN PURDUE UNIVERSITY EXPERIMENT STATION.

Farm stock that become badly infested with lice during the winter months do not thrive as they should, and in the spring may show marked unthriftness. This is especially true when stock are not well cared for and in young animals.

The sucking lice are more harmful than the biting varieties, as the former have mouth parts adapted to penetrating the skin and sucking the blood of the host. However, the symptoms may be as marked in sheep and other animals, that are badly infested with biting lice. In such cases the wool or coat becomes matted and detached, and the skin irritated and inflamed as a result of the animals rubbing, biting, and scratching the parts.

Good care during the winter will prevent the lice from doing a great deal of harm, and the simpler remedies, such as mercurial and sulfur ointment rubbed back of the horns or ears and along the mane and back, and insect powder dusted into the coat, may help in destroying them. A thorough treatment of the herd with dips or washes can not be practiced during the winter months unless the treated animals are prevented from catching cold. A favorable time to use this line of treatment is in the spring. A one or two per cent water solution of a tar disinfectant should be used. A convenient way to apply the remedy in the larger animals is with a spray pump, and in sheep and hogs by dipping. Whatever method is used, the coat and skin must be thoroughly wet with the solution. Proper care should be taken in mixing the remedy, as there is danger of making it too strong and irritating the skin.

After treating the herd, the stables, sheds, or sleeping quarters should be sprayed with about a two per cent water solution of the disinfectant, or whitewash may be used instead. This is necessary in order to prevent re-infesting the herd from the surroundings. If there is much litter around the yards and it can not be gotten rid of, it is advisable to move the herd to other yards. Tar disinfectants in one or two per cent solutions do not destroy the eggs or nits, hence, it is necessary to treat the animal again in ten days or two weeks.

Stockmen sometimes ask if the feeding of sulfur to lousy animals will not drive away or destroy the lice. The feeding of small doses of sulfur will do no harm, neither will it help in getting rid of the lice, and it can not be con-

ZENOLOUM VETERINARY ADVISER FREE.

A copy of this interesting and well-printed booklet, containing sixty-four pages of valuable advice, prepared by the leading veterinarians in the world for live stock owners and printed at a great expense by the Zenner Disinfectant Company, 61 Lafayette Ave., Detroit, Mich., will be sent to you upon request, absolutely free of all cost. This booklet is intensely interesting and you should have a copy. Do not wait a minute. Write for it now.

sidered a remedy for this class of disorders when used in this way. Sulfur is effective, however, when used externally, and the addition of four ounces to every gallon of the tar-disinfectant solution used, greatly increases the effectiveness of the remedy.

The Southeastern Sale.

The Southeastern Kansas Improved Stock-Breeders' Association sale of Shorthorn cattle at Fredonia April 13, was one of the most successful sales held in the State for two or more years. A notable feature of the sale breeders of Kansas, Missouri, and Oklahoma, who expressed themselves pleased with the high quality of the offering and proved their expressions sincere by their spirited bidding throughout the entire sale. The top price of the offering was for the Scotch Missie bull, Captain Archer, bred by S. C. Hanna, of Howard, Kans., and sold to J. F. Stodder, Burden, Kans., at \$610. Great results may be expected from the use of this great red and great breeding bull in Mr. Stodder's good Silver Creek herd. The top-priced female was Emma Tillycrairn, a Scotch Emma with a heifer calf at foot by Captain Archer, also from the Hanna herd and selling to H. M. Hill, of Lafontaine, Kans., at \$550. The attractions of Mr. Hill's good offering were the good heifers by his Marr Missie bull, Imp. Mariner. Two of the best of these sold to Mr. Hanna at \$200 each, much less than their real value, but Mr. Hill expressed himself as much pleased that so good a breeder as Mr. Hanna should think them good enough to add to his great herd. The top of Mr. Hill's consignment was Choice Goods and going to head the choice herd that V. L. Polson is establishing at Fredonia. The entire offering went to buyers as follows:

1. J. F. Stodder, Burden.....	\$610
2. Benj. Levering, Benton.....	195
3. W. W. Dunham, Fredonia.....	140
4. A. L. Barner, Belle Plaine.....	175
5. H. M. Hill, Lafontaine.....	350
6. I. Hudson, Fredonia.....	175
7. A. Moore, Maple City.....	110
8. V. L. Polson, Fredonia.....	275
9. F. T. Broadbent, Erie.....	65
10. Sidney M. Brown, Caney.....	70
11. S. C. Hanna, Howard.....	200
12. Frank Malugan, Carthage, Mo.	140
13. J. F. Stodder.....	170
14. S. Winney, Lafontaine.....	220
15. Cripps & Son, Elk City.....	200
16. S. C. Hanna.....	200
17. A. L. Barner.....	100
18. G. H. Geter, Elk City.....	66
19. J. E. Thompson, Fredonia.....	145
20. J. E. Thompson.....	70
21. A. L. Barner.....	195
22. Clark & Clark, Fredonia.....	55
23. J. E. Thompson.....	80
24. H. E. Bachelder, Fredonia.....	75
25. L. A. Hamilton, Fredonia.....	110
26. P. Newell, Carthage, Mo.	85
27. S. M. Barrigar, Coffeyville.....	155
28. P. Seunier, Neodesha.....	130
29. C. H. Clark, Colony.....	50
30. I. Hudson.....	75
31. L. A. Hamilton.....	85
32. J. F. Stodder.....	60
33. W. W. Durham.....	155
34. O. A. Lamb, Fall River.....	95
35. Leonard Teftner, Fredonia.....	55
36. W. Thompson, Silver Belle, Arizona.....	105
37. W. C. Cummings, Heston.....	150
38. J. P. Newell.....	70

Thirteen bulls sold for \$2,145, an average of \$165 each. Twenty-five cows and heifers sold for \$3,515, an average of \$140.60. Thirty-eight head sold for \$5,660, or an average of \$148.90.

The Ashcraft Sale.

The draft sale of Shorthorns from the herd of A. M. Ashcraft, Atchison, Kans., was fairly well attended by local breeders and farmers and a few outside breeders were on hand. The cattle were in fair condition and did not sell quite as high as was expected by Mr. Ashcraft, but the general expression of breeders in attendance was that the values received were about as high as those at most sales where no animals of pure Scotch lineage or show-yard reputation were included.

The number of young bull calves in the offering served to reduce the average considerably.

Among the buyers were T. M. Ramsey, Farmington; W. M. Oswell, Atchison; John Volk, Farmington; L. B. Allen, Cummings; Glancy Bros., Atchison; John Carroll, Easton; Henry Buttram, Lancaster; Bert Barber, Atchison; John Wynkoop, Doniphan; Wm. Chapple, Troy; James Leland, Cummings; Leon Calhoun, Potter; Peter Begley, Potter; Wm. Donley, Potter; R. Mayers, Easton; Isaac Lawler, Potter; J. E. Reckliff, Troy; Thos. Kline, Cummings; J. E. Sullivan, Ellington; Guy Bell, Atchison; Lewis Bell, Nortonville.

Allen's Sale of Good, Well-Bred Short-horns.

When a class of cattle, rich in both breeding and individual merit, such as will be offered at public auction, at South Omaha, May 1, by Mr. Geo. Allen, of Lexington, Neb., the publisher is glad to print their merits and call attention to them. No offering of Shorthorns so richly bred along Scotch lines of breeding has been sent into a sale-ring in the West for a long time, if ever, as Mr. Allen is consigning to his sale and every animal but two listed for his sale was bred by him and they are all good ones. Of the 22 young cows and heifers in his sale, all are pure or straight Scotch breeding but three head, and of the 19 head of bulls all but four are clean Scotch. Most of the others are of pure Bates blood, such as Grand Duchess, Dukes of Oxford, etc., of which there are none better. In cataloguing his cattle for this sale, Mr. Allen has gone farther than most any one else in that he gives the breeders names of the dams as well as of the sires, so that one can tell if they are Scotch on both sides of their ancestry. At least two-thirds or more of the cattle listed for this sale are by the pure Cruickshank bull, Godwin 115676, bred by Col. W. A. Harris, and used by him on his herd until sold to Mr. Allen. He is a twin brother to the noted bull, Godoy, the

sire of many good Shorthorns in this country, yet his days of usefulness are over, while Godwin is doing valuable service in Mr. Allen's herd at the ripe old age of 13 years. Godwin is a son of the renowned Imp. Spartan Hero and Imp. Golden Thistle, by the great Sittyon sire, Roan Gauntlet. Bred to a number of the eligible daughters of Godwin is No. 3 of the sale catalogue, Serepta Duke 238508, a very handsome roan 3-year-old, a show bull of great merit, with lots of size and quality and the half dozen or more calves that will be sold by the side of their dams are all red and show up to the credit of Serepta Duke as a splendid breeder. Any one wanting a show and breeding bull of pure Scotch breeding will do well to look after this animal, said by good judges to be the best individual since the days of Young Abbotburn. Send for sale catalogue, mention this paper, and come to the sale.

The Lincoln Importing Horse Co.

A. L. Sullivan, manager of the Lincoln Importing Horse Co., Lincoln, Neb., sends in copy for a change in his advertising. Look it over. It is good reading. Mr. Sullivan writes: We are having a good trade and are shipping a number of good horses into Kansas. We now have on hand a number of thoroughly acclimated Percheron, Belgian, English Shire, and German Coach stallions, and nobody in the United States can undersell us on first-class stallions. Prospective buyers can not afford to purchase until they examine our stallions."

EDITOR KANSAS FARMER:—Rosenbaum Bros. & Co., of the Union Stock Yards, Chicago, offer the specials herein enumerated annually to be competed for at the International Live Stock Exposition for the purpose of supplementing the efforts of the exposition as an exponent of the advancement of our recognized present-day celebrities in the production of the animal form by adding to the prizes that have hitherto been offered by the exposition, the breeding associations, and other public-spirited individuals.

They propose to offer to the breeders and feeders in the different States an additional incentive to add further lustre to their achievements by bringing about a competition between State breeders. The specials are as follows:

To the State which sends to the International animals that win:

The greatest number of points, \$500.

Second greatest number of points, \$300.

Third greatest number of points, \$200.

These winnings are then to be turned over to the animal husbandry department of the agricultural college of the State winning, as an appreciation of the improved work that is being accomplished by the agricultural colleges in the education of farmers' sons in the science and practice of field tillage, the growing and care of crops, and the science of breeding and art of feeding, directing the experiment stations receiving the money to use it in paying prizes on live stock or to successful students in judging live stock and grains, or to both, at the winter meetings known as the "Farmers' Short Course in Agriculture" at the different agricultural colleges.

The details governing the disposition of the premiums are to be arranged by the dean and the professor of animal industry and the professor of agriculture at the college located in the successful State.

W. E. SKINNER, Gen. Mgr., Chicago, Ill. Union Stock Yards.

More Fame for McLaughlin Bros.

McLaughlin Bros., Columbus, Kansas City, and St. Paul, have added a new feather to their cap. In a recent letter they write: "During the Horse Show at Paris, the French Government officials wanted two of the best Percherons exhibited. They needed these horses for their most important stations in the Perche. On account of the fact that we had purchased the best stallions in France, they were compelled to come to us. In the 3-year-old-stallion class, horses purchased by us a long time prior to the show, won first, second, third, fourth, fifth, and sixth prizes. We sold the French Government the fourth prize stallion, 'Coco,' and the sixth prize stallion, 'Luce,' for a price higher than the Government ever paid anybody for two Percheron stallions. The French Government was placed in the same position as the buyers in America—they wanted the best stallions and were compelled to come to us."

The following letter explains itself.

"Republic of France.
Minister of Agriculture, Department of the Government Stud.
Paris, June 28, 1905.

"Mr. McLaughlin:—I wish to thank you very much for your kindness in permitting us to purchase for the Government Stud, two of your excellent Percherons. We have very great need of them for the stations in Perche, where it is necessary for us to have good reproducers.

"I pray you to accept, dear sir, my best regards.

"Director of the Government Stud,
"HORNEZ."

Gossip About Stock.

Kansas has 158,591 sheep and only 170,807 dogs. Kansas dogs are very profitable.

The last quarterly report issued by Secretary F. D. Coburn, of the State Board of Agriculture, gives all of the papers and discussions had at the last annual meeting and is mighty good reading.

Dr. O. L. Kerr, Independence, Mo., still has a few choice O. I. C. boars closely related to Kerr Dick, Big Mary, and his other famous World's Fair winners that will please purchasers wanting something of the most approved type and breeding in the popular O. I. C.s.

M. C. Vansell, of Muscaton, Kans., one of the oldest Shorthorn breeders in the State, is offering for immediate sale a pure Scotch bull which will please a most exacting purchaser wanting an all red bull for light service this

The Hog for Profit

is the Hess fed hog. The pig that gets a proper tonic to aid digestion and help every organ to do its proper work, puts on the fat the quickest and easiest. Dr. Hess Stock Food is such a tonic; there is nothing like it to give "tone," vigor, and easy keeping qualities to all kinds of live stock, and to cure and prevent disease.

DR HESS STOCK FOOD

gives healthy digestion and assimilation, so that the least food is wasted—every grain of corn and drop of milk makes pork. It is the prescription of Dr. Hess (M.D., D.V.S.), containing tonics for the digestion, iron for the blood, nitrates to expel poisonous materials from the system, laxatives to regulate the bowels. It has the recommendation of the Veterinary Colleges, the Farm Papers, is recognized as a medicinal tonic and laxative by our own Government, and is sold on a written guarantee.

5¢ per lb. in 100 lb. sacks; Except in Canada and extreme West and South. 25 lb. pail \$1.60. A tablespoonful per day for the average hog. Less than a penny a day for horse, cow or steer. If your dealer cannot supply you, we will.

DR. HESS & CLARK, Ashland, Ohio. Also Manufacturers of Dr. Hess Poultry Pen-c-e-e and Instant Louse Killer.



No More Blind Horses For Specific Ophthalmia, Moon Blindness and other Sore Eyes, BARRY CO., Iowa City, Ia., have a cure

DEATH TO HEAVES Guaranteed A VETERINARY SPECIFIC 14 years safe, One to two cans will cure Heaves. \$1.00 per can. Of dealers, or express prepaid. Send for booklet. The Newton Kennedy Co., Toledo, O.

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during sparetime; taught in simplest English; Diploma granted; positions obtained successful students; cost in reach of all; satisfaction guaranteed; particulars free. ONTARIO VETERINARY CORRESPONDENCE SCHOOL, Dept. 17, London, Canada.

KRESO DIP KILLS LICE

ON ALL LIVE STOCK EASY & SAFE TO USE

BLUE CATTLE LOUSE
KRESO DIP
KILLS THIS AND ALL OTHERS
RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write for Free Booklets
For Sale By All Druggists

PARK, DAVIS & CO.

HOME OFFICES AND LABORATORIES:
DETROIT, MICH.
BRANCHES: NEW YORK, CHICAGO, ST. LOUIS, BOSTON,
BALTIMORE, NEW ORLEANS, KANSAS CITY, INDIANAPOLIS,
MINNEAPOLIS, MEMPHIS, U.S.A.; WALKERVILLE,
ONTARIO, MONTREAL, QUEBEC.



**THE BEST
Antiseptic
Remedy
For Family and Farm**

**SLOAN'S
LINIMENT**

KILLS PAIN.

Dr. EARL S. SLOAN,
615 Albany Street, Boston, Mass.

Dipolene

For All Farm Stock
Every farmer should
dip his stock in Dipolene—promotes health.

Prevents Disease

It kills sheep ticks, lice on hogs, horses and cattle, fleas on dogs. Cures scab, eczema, mange and all skin diseases on domestic animals; lice on chickens. Dipolene does it in a minute without injury. One gallon makes 100 gallons of dip ready for use. Write today for price and FREE booklet, "DIPPING FOR DOLLARS"—learn how easy it is to dip.

MARSHALL OIL CO.,
BOX 13,
MARSHALLTOWN, Ia.

**BICKMORE'S
GALL CURE**

BE SURE
AND WORK
THE HORSE

Is sold by all dealers and they will pay the money back if it does not cure harness and saddle gall. Wire cuts, speed cracks, scratches or grease heel while you work the horse. Nothing better for bruises, rope burn, old sores or cracked cow's teats. No substitute one half so good. Write today for Bickmore's Gall Cure Co., Box 916 Old Town, Maine.

**Bone
Spavin**

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

**Fleming's
Spavin and Ringbone Paste**
Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Slideline, new and old cases alike. Write for detailed information and a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound. Indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ills.

ABSOLUTELY FREE to any article you select from our handsome illustrated catalog of Household Articles. Write for catalog and select gift which we will send postpaid.

DUDLEY PURCHASING CO., P. O. Box 99, New York.

"KANT SLIP" SKIRT FASTENER No belts, pins, hooks. No newlog. Will not injure delicate fabrics. Sample 35 cents. Send address 125 married ladies, receive fastener free. Agents wanted, large profits.

Shelton Co., Sta. A. Denver, Colo.

KANSAS FARMER
Fifteen Months for \$1.00
Thirteen Weeks **FREE**

season. He is good enough to be in the reckoning in the strongest of the junior yearling classes this fall, and his breeding is excellent. Mr. Vansell is also selling Barred Plymouth Rock eggs from his choice flock at 75 cents for 15. Note advertisement and see or write Mr. Vansell.

John Bollin writes that he can still spare a few yearling sows bred to Nemo L's Duke, for May and June farrow, and some good summer and fall boars, some especially nice ones by the World's Fair winner, The Picket. Note the advertisement of Mr. Bollin and see or write to him.

E. E. Axline, the well-known breeder of Poland-Chinas at Oak Grove, Mo., reports a splendid egg trade, having sold recently a single order of 1,000 eggs. Mr. Axline's flock of Plymouth Rocks is of the same high quality as his herd of Poland-Chinas. He also has a few fall pigs of either sex with which he can supply his customers.

J. R. Roberts, the oldest Poland-China breeder in the Cherokee Strip, is one of the very few to report good luck with his early litters. Mr. Roberts' new herd boar, R's Grand Chief, the highest priced herd boar sold in Oklahoma, is siring phenomenally large litters, the first numbering 16 and the second 10. Prolificness is characteristic of Mr. Roberts' herd. He is making a special offer of late summer boars and desires to correspond with any one in need of Poland-Chinas of either sex.

The three days' sale at Kansas City, April 3, 4, and 5, under the management of W. C. McGavock, of Aberdeen-Angus and Hereford cattle was fairly attended, but prices ruled a little low on the female portion of the offering each day of the sale. The bulls, especially those of good quality and good serviceable ages, sold much higher than the females. The first day 63 Aberdeen-Angus, 17 bulls and 46 cows and heifers, were sold, the bulls at an average of \$97.20 and the females at an average of \$73.80. The average of the entire lot was \$80.60. Miss C. N. List, of Syracuse, Neb., topped the sale in the purchase of No. 3, a good Erica cow with a calf at foot at \$325. Miss List was a bidder on the good things throughout the sale, buying several good ones. Two other ladies were buyers. Miss Mary Best, of Medicine Lodge, and Miss McCreary, of Highland, buying one each. R. S. Williams, of Liberty, Mo., was possibly the heaviest buyer. Other buyers were Geo. Kitchen Jr., Gower, Mo.; H. R. Clay & Son, Pleasant Hill, Mo.; E. R. Wilhoit, Holt, Mo.; Chas. E. Sutton, Lawrence, Kans.; G. W. Switzer, Harrisonville, Mo.; J. W. Fishback, Kansas City, Mo.; Armour & Co., Kansas City, Mo.; M. W. Harding, Humboldt, Neb.; A. C. Mellette, Galena, Mo.; A. Laughlin, King City, Mo.; W. R. Kinmore, Highland, Kans.; W. M. England, Dallas, Mo.; J. Chambers, Bedford, Iowa; L. H. How, Humboldt, Neb. The Herefords, sold the 3d and 4th, averaged \$101 on 92 head, 34 bulls averaging \$118.80, and 58 females \$90. The top price for one animal was secured for a splendid bull calf just a little over a year old from the herd of Jas. Paul, Patch Grove, Wis., selling to W. A. Hurt, of Booneville, Mo., at \$460. Other buyers were: Klaus Bros., Bendena, Kans.; I. H. Roberts, Lancaster, Mo.; Samuel Drybread, Elk City, Kans.; Jas. Funkhouser, Plattburg, Mo.; J. McKensie, Kansas City, Mo.; M. W. Brabb, Alta Vista, Kans.; J. E. Summers, Sifton Hill, Mo.; C. W. Armour, Kansas City, Vista, Kans.; J. E. Summers, Clifton, F. Davis, Odessa, Mo.; W. H. Holt, Liberty, Mo.; W. A. Hurt, Booneville, Mo.; E. C. Lilly & Son, Piedmont, Kans.; T. P. Whitenburg, Pleasant Hill, Mo.; Geo. S. Smith, Craig, Neb.; Robt. Nelson, Morgan, Wyo.; E. E. Davidson, Randolph, Mo.; J. H. Lathrop, Washington, Ia.; R. P. Henry, Pleasant Hill, Mo.; F. W. Sheely, Durant, Ia.; John Gosling, Kansas City, Mo.; D. D. Rees, Penora, Ia.; Fred Sutton, Concordia, Kans.; Jos. Oab, Topeka, Kans.; Sweezy & Hurt, Booneville, Mo.; H. D. Henson, Williamsburg, Mo.

Cheep Summer Rates to California. The transcontinental lines always have made reductions in the round-trip rate to California for a few days each summer on account of some big National gathering. Not until this year were such low rates authorized for the entire summer. This new departure was adopted in order to stimulate travel to California, and thereby induce Americans to see their own country first, instead of going abroad.

Beginning June 1, and until the middle of September, first-class tickets will be sold to the principal California points at \$75 from Chicago, \$69 from St. Louis, \$60 from Kansas City, and proportionately from the East generally. These tickets will be limited for return until October 31.

The Santa Fe also announces that the summer rate to the Grand Canyon of Arizona and return, also to Phoenix and return, will be \$5 less than the above figures.

Tickets sold at rates named will be honored on the California Limited.

During the last week in April and the first week in May, also during the last week in June and the first week in July, the Santa Fe will make a rate of about one fare to California and back, account Mystic Shriners' convention at Los Angeles and N. E. A. convention at San Francisco. Several special excursions will be run from Chicago by way of the Grand Canyon.

The Wyatt Manufacturing Company. The Wyatt Manufacturing Company, of Salina, Kans., who make the famous Jawhawk stackers and rakes, and who were advertisers with THE KANSAS FARMER last year, start their advertising again with this issue. F. Wyatt, the proprietor of this business, came to Salina about three years ago. He realized the difficulty farmers meet in securing competent help to care for their crops of hay, and his invention of the well-known Jawhawk stacker has been one of the important factors in overcoming this great obstacle. No one knows better than the farmer what it means to secure help during hay har-

Save Money on Oil

We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

Our Premium Machine Oil is sold at \$3.50 per barrel. Thousands are using it and find it all right.

Every barrel guaranteed, and you be the judge. Other oil costs 35c to 40c per gal.; ours costs \$3.50 per barrel. Freight rate is 32c per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2c.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

Poland-China Bred Sow Sale

at Clay Center, Kansas, April 28, 1906

Instead of April 21, as appears in W. Breeders Journal.

40 sows bred to Expansion or sons of Expansion; some aged sows to farrow about May 1. Others are yearlings and gilts, to farrow in May and June. They are medium to large in type, are smooth and plenty of quality; not overfat, but a good, useful lot of the Expansion kind. Drop us a card and we will mail you free breeding register for your herd and history of the P. C. breed, with sale list.

H. C. Dawson & Sons, Endicott, Nebraska

Z. S. BRANDON, Lincoln; SAM'L LANGWORTHY, Clay Center.

When writing mention Kansas Farmer.

BLACKLEGOIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

Nodose to measure. No liquid to spill.

Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations.

For Sale by All Druggists. Literature Free—Write for It.

PARKE, DAVIS & COMPANY.

DETROIT, MICHIGAN, U. S. A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

vest. It comes at a time when every man who can or who is willing to work is employed and when the demand for help is greater than the supply, and at a time when a few days' delay may be the means of ruining the crop. With this machine the farmer can not only go ahead without delay, but can save 50 per cent of his labor bill. He can build a stack any size or shape and it will keep better than when stacked by hand. It is simple in construction, easy to move about, and any one can operate it. It has only been a few years since straw was all stacked by hand, and to get the help to do it was one of the serious problems of thrashing time, but in a short time see how the wind stacker has revolutionized the entire business, and to-day one man does the work and does it better than it was formerly done with four or five hands. So it is with the Jawhawk stacker. It does the work of three or four men and does it better and faster and without delay. In a year a farmer can save the cost of one to say nothing of the convenience of owning it. The price is within the reach of all, and it will pay you to read the advertisement and send to the firm for their prices. Mention THE KANSAS FARMER and write them.

How to Buy a Farm Phone.

One of the handsomest little books that has lately come to THE KANSAS FARMER office is one issued by the Electric Appliance Co., Chicago, Ill., bearing the title "How to Buy a Farm Phone." Not only does it tell all that its title indicates, but it is filled to the covers with information about how to organize a rural telephone line, how to build and operate it, how to make repairs, how to secure a franchise, how to make a subscribers' contract, and a lot of other valuable information that is difficult to obtain in so condensed a form from any other source. We have arranged with the Electric Appliance Co., of Chicago, to send one of these handsome little books free to each of our readers who will write for it and mention THE KANSAS FARMER in the letter.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals à la carte. Ask for tickets via the Nickel Plate Road, Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent No. 113 Adams St., Room 298, Chicago.

"Hast thou an enemy? Make him thy friend. So hast thou gained a double conquest, for thou hast conquered both thyself and him."

I Will Make You Prosperous
If you are honest and ambitious write me to day. No matter where you live or what your occupation has been, I will teach you the Real-Estate business by mail; appoint you Special Representative of my Company in your own town; start you in a profitable business of your own, and help you make big money at once. Unusual opportunity for men without capital to become independent for life. Valuable book and full particulars free. Write today EDWIN R. MARDEN, Pres. Nat'l Cooperative Realty Co., 1166 Athenaeum Bldg., Chicago

Your Life Current.

The power that gives you life and motion is the nerve force, or nerve fluid, located in the nerve cells of the brain, and sent out through the nerves to the various organs.

If you are tired, nervous, irritable, cannot sleep; have headache, feel stuffy, dull and melancholy, or have neuralgia, rheumatism, backache, periodical pains, indigestion, dyspepsia, stomach trouble, or the kidneys and liver are inactive, your life-current is weak.

Power-producing fuel is needed; something to increase nerve energy—strengthen the nerves.

Dr. Miles' Restorative Nervine is the fuel you need. It feeds the nerves, produces nerve force, and restores vitality.

"When I began taking Dr. Miles' Restorative Nervine and Anti-Pain Pills I was confined to my bed. I had severe nervous spells, the result of two years illness with malaria. I gradually grew so weak that I was unable to sit up. The spells would commence with cold chills, and I would become weak and almost helpless. My circulation was poor. I had doctor'd right along but grew weaker and weaker. The Nervine seemed to strengthen me right away and my circulation was better. I have taken in all seven bottles of the Nervine, and I am entirely well."

ROSA E. WEAVER, Stuart, Ia.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

Home Departments

CONDUCTED BY RUTH COWGILL.

Ships That Never Came Back.

JOHN C. BAIRD.

I freighted a ship with Hopes and Dreams,
And trimmed the sails with prayer,
And hoisted the anchor to the decks,
On a morning bright and fair,
And she glided away in proud array,
On a gleaming jasper sea,
But in all the years of waiting and tears,
She never came back to me.

I freighted a ship with the Greed of Gold,
And set it afloat again,
And victualled it well, and barbed her decks

With guns and valiant men;
As she left the shore, the breakers roar,
A requiem seemed to be,
For in weary days, to my yearning gaze,
She never came back to me.

I freighted a ship with Fame's Desire,
And gave her the wings of steel,
And sent her away on a stormy day
With an anguished heart's appeal.
Then struggles began with my fellow man

Whose cargo the ships should be,
But she quelled the brawl for never at all
Did the ship come back to me.

Then I sailed a ship all laden down
With Love for my fellow man,
And all of her cost from my ledger I crossed
Ere the voyage of the ship began.

But never a ship that left the slip
Made such a voyage as she,
For a thousand weight of her previous freight
Came sailing back to me.

Housecleaning.

The time is approaching when the industrious housewife will begin her annual or semi-annual war upon dirt—the time when the "soap is on the stairs and the carpets on the line"—and a few suggestions upon the subject of arranging or rearranging the house might be opportune. The masculine side of the house is prone to ridicule the women for changing the places of furniture and pictures and for wanting to make things look different. They call it fickleness. They do not realize the necessity for a change or understand why things look so much better to her and seem so much more convenient, even if presently placed back in the same places they occupied a few months before. Human nature wearis of sameness. The Maker of all things realized this when He called into existence this varied and beautiful world. The wife sees the same things continually. Most wives seldom leave the home.

It is the demand of nature calling for a change and not fickleness of nature. I would advise such to make as much of a change as possible, even changing the furniture from one room to another. It can be done to advantage. It will be almost as good as a change of climate.

Housecleaning need not be made obnoxious to any one, and may be done with comparative ease. The habit of tearing up the whole house at a time and making life miserable for a week at a time is out of fashion and unnecessary. It is no wonder that it is looked upon with dread by all the inmates of the home. Housecleaning should begin early. March is a good time doing only one room a week. Begin with the top floor and work down, cleaning the attic or store room first, and before you know it the task is over and the men folks have hardly found it out. The appearance of the walls of the home is very important and they are so easily and cheaply tinted with alabastine (this is not an advertisement) that there is no excuse for their not being pretty. The white, hard finish is desirable from a sanitary point of view, but is tiresome to the eye and does not furnish a good background for pictures and it will not remain clean long. The tinted walls should harmonize with the other furnishings of a room. The walls of a room should be lighter than the floor-covering and darker than the ceiling and the general hue of wall and ceiling should be the same. The drop-ceiling effect is pretty, using a picture moulding at any distance from the ceiling that is desired, but for low rooms all horizontal lines should be avoided as they tend to lower the apparent height. Pictures break the monotony of the walls and beautify the home greatly. They need not be expensive, but care should be taken in their selection. Copies of fine pictures may be purchased for a small sum and are a good investment. The hanging of the pictures is important and their position and the light and the general effect need to be studied.

For the floors nothing is cleaner or

more sanitary than bare floors with rugs. The floor may be hard wood and oiled or varnished and waxed, or simply painted and left without covering for a foot or more from the baseboard. Matting is a cool, clean, and cheap floor-covering and it comes in pretty styles. To have an attractive home one does not have to be a millionaire, but what is needed more than that is good taste and the ability to arrange things to look cozy and homelike.

Tested Recipes.

Fruit Salad.—Three oranges, 3 bananas, 2 bunches of white grapes, $\frac{1}{2}$ can pineapple, 1 cup English walnuts; sweeten to taste; 1 box gelatine dissolved in cold water, then add 1 pint of boiling water; let it partly cool then pour over fruit. Sometimes I use jello in place of the gelatine.—Mrs. E. C. Nordstrom, Lyons.

Raisin Puffs.—1 tablespoon butter, 2 tablespoons sugar, 1 egg, $\frac{1}{2}$ cup milk, 1 cup flour, $\frac{1}{4}$ cup raisins, 1 teaspoon baking powder. Seed and chop the raisins, beat the butter, sugar, and eggs together until very light, add the milk and raisins, sift in the flour, and then the baking powder; beat until smooth and turn into small greased custard cups, having them $\frac{3}{4}$ full; steam from thirty to forty minutes. Turn out and serve hot with hard sauce.—Katharine Lawrence, Philadelphia, Pa.

Angel Food.—Whites 11 eggs, 1 tumbler sugar, 1 tumbler flour well sifted, mix well with sugar and gently fold into eggs never stirring. Flavoring to suit taste, and use baking powder if preferred.—Mrs. S. S. Hockett, Gage, Okla.

Philadelphia Butter Pie.—Cover a pie plate with crust as for custard pie, a piece of butter the size of an egg 2-3 cup sugar, 1 cup sweet cream—or rich milk will do with little more butter added, 1 tablespoon flour. Stir butter, flour and sugar together, then stir in the cream, pour in the plate and bake till brown.—Mrs. Sarah A. Morse, Sterling.

Cocoanut Cookies.—1 cup cocoanut, 1 $\frac{1}{2}$ cups sugar, $\frac{1}{4}$ cup butter, $\frac{1}{2}$ cup milk, 2 eggs, 1 large teaspoon baking powder, $\frac{1}{2}$ teaspoon vanilla, flour enough to roll out.—Mrs. Sarah A. Morse, Sterling.

Chocolate Pudding.—1 quart milk heated to boiling point, beat 3 eggs, 2-3 cup sugar and 2 tablespoons cornstarch or flour. At the same time you put the milk on to heat, put into it nearly 1 cup of grated chocolate, more or less just as you like. Just as the milk is about to boil, stir in your eggs, sugar and cornstarch. Cook about ten or fifteen minutes.—Mrs. Sarah A. Morse, Sterling.

To Purify the Blood, Eat Raisins.

A very agreeable little fad, that will have good results if it becomes epidemic, is the eating of raisins as a purifier of blood. The prescription calls for one-quarter of a pound of the best table raisins, eaten daily and slowly masticated, without swallowing the skin or the seeds. Raisins, old sailors and old miners will tell you, ward off disease and are also curative. Policemen who are obliged to add to their weight quickly in preparation for civil service examination will also testify to their value in adding to one's avoidance.

Young women afflicted with skin trouble will also find a cure in raisins, if, during the time they have their daily quarter of a pound, they adhere to a simple diet.

She Is the Same Woman Still.

Nobody of any consequence in these days would be willing to risk his reputation by denying that Woman has made within the last century, and is still making wondrous advancement along many lines of intellectual development.

We behold evidences of her progress everywhere. She carries off first prizes in the great universities. She occupies conspicuous places in the learned professions. Beginning as a writer of silly novels for the entertainment of very young people, she has become a writer of great works that challenge the best productions of the masculine mind.

Where there was only one Elizabeth three hundred years ago, one Mme. De Staël a hundred and fifty years ago, one

For Breakfast Luncheon or Tea

A few small biscuits easily made with Royal Baking Powder. Make them small—as small round as a napkin ring. Mix and bake just before the meal. Serve hot.

Nothing better for a light dessert than these little hot biscuits with butter and honey, marmalade or jam.

You must use Royal Baking Powder to get them right.

ROYAL BAKING POWDER CO., NEW YORK

George Elliot fifty years ago, there are hundreds, nay, thousands, of women now who can hold their own against man in counsel, conversation, or literature.

And yet—and yet—astonishing as it may seem, paradoxical as it may seem—the new woman, with all of her intellectuality, independence of thought, force of character, is the same woman still, in many charming respects.

She is just as much afraid of a mouse as she was in the darkest period of the middle ages. Even when she attends a literary night at the Business Woman's club, as she did on Friday evening last, and a mouse scratches behind the wainscoting, while her mind is supposed to be wrapped in a lecture on Scotland's greatest poet, she pulls her skirts about her and jumps on a chair, as her material ancestors did hundreds of years before business women's clubs were invented.

Would we—that is, would men—have it otherwise? Well, we should say not!—Chicago Inter Ocean.

Household Notes.

A piece of charcoal put into the pot with boiling onions will absorb most of the odors.

Lemons can be kept almost indefinitely under glass that is light and air-tight. Set one under a goblet and see.

To wash anything that is greasy use hot soda water. The alkali turns the grease into soap, which will do its own cleaning.

A cup of chopped celery, if added to almost any stuffing for fowls, will improve it.

Macaroni, being easily digested and very nutritious, forms a welcome addition to the sick-room menu. For the invalid it can be added to a custard and delicately baked or boiled in salted water till tender and serve with cream and sugar.

Try washing the hands with a little sugar added to the soap. This greatly increases the lather and cleansing power, and will remove dirt, chemical stains, etc.

A pinch of sugar added to finely made mustard not only makes it much more tasty, but keeps it fresh much longer.

Celery, when eaten freely, produces alkaline blood, and where this exists there is neither gout, rheumatism, nor nervous prostration to any extent. When cooked it is more healthful than when eaten raw.

Washing day is justly dreaded in the heat of summer, when all work is a double burden to the flesh. Anything that lightens the work is therefore especially welcome, but though the tools of to-day are superior to those of our grandmother's, modern invention has done comparatively little to lighten the labors of the laundry. In spite of the cost of washing machines and the representations of their agents, a perforated zinc rubbing board is still the most useful tool that a good laundress can command.

"A Kalamazoo Direct to You"

You save from 20% to 40% by buying a Kalamazoo Stove or Range direct from the factory at lowest factory prices. Moreover, you get a stove or range not excelled by any in the world. We guarantee quality under a \$20,000 bank bond.

We Ship On**360 DAYS APPROVAL**

and We Pay the Freight.

If you do not find the Kalamazoo exactly as represented, the trial does not cost you a cent. It will pay you to investigate.

Send Postal for Catalog No. 189.

All Kalamazos are shipped promptly, blacked, polished and ready for use.

Kalamazoo Stove Co., Mfrs.,
Kalamazoo, Mich.

All our cook stoves and ranges are fitted with patent oven thermometer which makes baking easy.

**BARGAINS**

Chinaware Sets, ...	\$1.80 to \$12
26 Pieces Table Cutlery, good plate,	\$2.50
Sure-Cutter Shears and Scissors, 2 pairs,	50 cts
Wade & Butcher Razor Strap and Home,	\$1.00
\$1.00 box Medicated Toilet Soap,	35 cts
Headquarter for Watches,	.75 cts. to \$18.00
Black Gloss Buggy Paint, gallon,	\$1.50
Gasoline Stoves, 2 burners,	\$2.75
Poultry and Stock Foods, packet,	15 cts
Cigars, per 100,	\$1.50 to \$2.50
Washing Machines, none better,	\$3.25
Send for Catalogue of many snap bargains.	
Agents wanted. New Process Mfg. Co., Dept.	
50, Lincoln, Kans.	

The Kansas State

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,

BOX 50. MANHATTAN, KANS.

Collections made in all parts of the United States
No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

KANSAS

Special attention given to stock-breeders account.

Reference furnished on application.

The Young Folks

The Oracle.

I lay upon the summer grass,
A gold-haired sunny child came by,
And looked at me as loth to pass,
With questions in her lingering eye.

She stopped and wavered; then drew
near;
(Ah, the pale gold around her head!)
And o'er my shoulders stooped to peer—
"Why do you read?" she said.

"I read a poet of old time
Who sang through all his living
hours,
Beauty of earth—the streams, the flowers,
The stars more lovely than his rime.

"And now I read him since men go
Forgetful of these sweetest things;
Since he and I love brooks that flow,
And dawns, and bees, and flash of wings."

She stared at me with laughing look,
Then clasped her hands upon my
knees
"How strange to read them in a book!
I could have told you all of these!"
Arthur Davison Ficke, in Harper's.

Fleetfoot: The Autobiography of a Pony.

CHAPTER V.—MARCELLA.

Mr. Dearcot looked from one to another of his willing helpers, and with a frown settling on his good-natured face began a tirade of self-abuse.

"There is something wrong with the way I manage things, and with all my methods," he announced as he propped open a shed door which the wind immediately slammed shut again, almost entrapping his silken hat in the process. The men made merry over the mishap and while assisting him to secure the riotous door cautioned him against future disapproval of his manner of conducting affairs.

The lawyer, however, wanted to have his say. "It's just this way," he continued, "I love the farm for my own sake and for the children's and because I believe it is the only place to get the best that life holds. Then, on the other hand, after spending the better part of my years learning a profession, I can't very well give it up to do something I know nothing about. Some say I make a good lawyer; everyone knows I'm a Simple Simon in agricultural matters. If I sell my land and move to the city, there is nothing ahead but noise and smoke and endless traffic with no avenue of escape. If I continue to farm, in other words, if I continue to run you fellows into the ground, there will be no satisfaction for any of us."

"With all your conscientious efforts there will be losses and confusion, for even if you are a large force it is impossible to stretch over everything. And now, my good men, what are we going to do? My place is here to direct and oversee things, but being found wanting we will have to manage some other way. Does anyone know that way?"

Mr. Dearcot had been nervously whittling a stick, and upon looking up for his answer was surprised to find that he had but one listener besides myself and that was Joe, the individual whom I had kicked, but I was now trying to "make good" with friendly overtures. As he fondled my inquisitive little face he glanced smilingly at the unhappy combination of lawyer and farmer.

"You're all right, Mr. Dearcot," he remarked cheerfully, "and please don't make so much ado about nothing. Stick close to your profession, for they say you are without an equal in your special line. You'll have no trouble picking up a good farm-manager and then we will all get on beautifully. And another thing, don't waste any pity on us fellows; we like our work; if we did not, all your lads wouldn't have deserted you in the middle of your fine plea, just for the purpose of feeding the horses and milking the cows."

"Well, surely enough they are all gone, even Lyall," exclaimed Mr. Dearcot with a relieved look.

"And by the way, Joe," he went on, "I'd rather have your bright way of seeing things than all the gifts in the catalogue. Difficulties will straighten themselves out some way if we only can summon faith and patience to our aid, but very few of us are philosophers enough to try."

Just then Lyall came 'round the corner, carefully carrying his dinner pail which was flowing over with warm frothy milk. All the tear-stains had disappeared from his face and for the first time I noticed what a pretty boy he was. He smiled sweetly as he said: "Papa will you and Joe please push the little colt into the shed, I want to give him his supper before it gets cold."

Guided by gentle hands, and follow-

ing the tempting bucket of milk, I reached the comfortable room which was to be mine for all time. The walls were whitewashed and the floor was covered thickly with fragrant hay. Through a slatted partition I could see a long row of horses enjoying their evening meal, and not far from me standing before a manger piled high with food was that dear, old rogue, Big Jake. With many loving pats, Lyall left me after I had drank all the milk in the pail, and then I lay down feeling happier and more contented than ever I did in my life before. Soon the soft patter of rain-drops on the roof lulled me to sleep.

The next morning I was awakened by the sun burning down upon my back. Thoroughly rested I stood up and the first thing I noticed when I shook the particles of hay from my coat was a red ribbon dangling before my eyes. It seemed that while I slept some one had braided my fore-lock, meager as it was, and tied it with a dainty bow. In another moment I heard a merry laugh, and looking in the direction from whence it came I spied a perfect fairy of a little girl. She was plump, rosy-cheeked, blue-eyed and wore long, golden curls. Reaching up she encircled my neck with her small, white arms. "Poor, little darling," she said pityingly. "You'll have a hard time, but I dess I can pull you frue."

CHAPTER VI.—TIME PASSES.

Little Marcella Dearcot did not shirk the duty she had taken upon herself, that of "pulling me through." With watchful tenderness she cared for my every want, bringing me past ungainly infancy into sturdy childhood and from thence to the border-land of the fully-grown. This last state was reached when I was about two years of age, and though my beauty was commented on by all, a bitter disappointment rankled in my heart.

From the time I was able to use my reasoning powers I had dreamed of the days in the future when I should be a match for Big Jake. He was my ideal of a perfect horse, and I hoped to look so much like him that we would be known as "the match team" as were Mr. Dearcot's beautiful drivers; only, I had planned that we should do none but heavy work, such as hauling gigantic logs and great powerful machines. Then my heart would thrill with happiness as I saw myself doing more than my share in order to spare Big Jake; going up hills, I intended to pull far ahead, thus relieving Jake of the strain. In this way he could grow old gracefully and not become gaunt and hollow-eyed as I had seen other venerable horses do.

But my ambitions, like nearly all earthly dreams, came to naught; yet when the first shock of my dwarfhood was over, I lost no time in vain repinings, for what was the use in making myself and others miserable because I was not what I never was intended to be? And I have always been glad since then that I knew how to be contented with my lot. I think, also, that I have given more happiness by being just a pony than I would if I had been a mammoth horse. It seems there are only too many who are willing to do the great parts, but it is the little things that really make the world go round.

Until my second birthday I spent most of the time in the big park at the back of the barn, cropping grass and standing under the shade of the trees which grew in shapely clusters by the creek's side.

Of course, I did not live out in the open when the weather was severe and the fierce winds blew; it is only the poor animals who have no one to care for them which do that. I had a warm stable and a soft bed, and better still the company of Big Jake. At times he would come in, and without passing any compliments would eat a portion of my bed and calmly put out of sight all the corn-cobs he could find. On his way back to his own stall he sometimes stopped and sniffed with amused tolerance at my miniature harness which hung upon dainty pegs.

Oh! you are surprised that I have a set of harness at the early age of two years. It is nothing to be wondered at for the children, Lyall and Marcella, harnessed me when I was but a few months old. They were too careful of me to drive me fast or ride me then, fearing, as they said, that I would become wind-broken or "sway-backed." I don't mind being broken single and double, but I consider the "wind-break" a bad method. Then again no driver can make any progress when his horse is always swaying back, the motion should be forward.

I was more than pleased when I was old enough to be hitched up, for until that time I had no opportunity of go-

Simpson, Eddystone Solid Blacks

Why have they been the standard dress-goods for more than sixty years?

Honest making—the best that human knowledge dictates; staunch materials; absolutely fast colors.

EDDYSTONE PRINTS

The Eddystone Mfg Co (Sole Makers) Philadelphia



LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,**

New York

Cheap Excursions Southwest

Low Rates each first and third Tuesday, monthly

Round-trip tickets sold from nearly all Rock Island points in the North and Central West to practically all points Southwest.

Rate about half the regular fare.

Pluck means sure success in the Southwest. An illustrated book or two will help you to a better acquaintance with the country. I'll be glad to send them on request. State the section which most interests you.

Rock Island System

A. M. FULLER, C. P. A.

TOPEKA, KANSAS

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

- Bookkeeping
- Shorthand
- Civil Service
- Telegraphy
- Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

ing into society. It was not until then, either, that I became fully acquainted with my own family. This interesting circle consisted of Mr. Dearcot, before mentioned, and charming Mrs. Dearcot, who besides having a great deal to look after in her own household, was constantly being called upon by admiring visitors, who either wanted advice, or knew some one who really needed advice; sometimes, also, there was a demand for such substantials as clothes, food, or money.

Next in order was Lyall and Marcella, my special benefactors, and last, but by no means least in my regard, was Baby Doris, a few weeks older than myself.

Besides these dear ones there were several rosy-cheeked, light-hearted girls who helped Mrs. Dearcot about the house and when they had nothing else to do gave me cookies and apples, and once in awhile drove me on a visit to their friends.

So you see, everything considered, we were a happy community, each one contented and doing his best.

Out in the barn-yard, although the different varieties of stock never could be reconciled to each other's rights, I noted with pleasure how perfect was the harmony among the human brotherhood. And this, in my opinion, was as it should be, for what would the reasoning power and noble, upright bearing of a man avail him if he saw fit to put himself on a social level with us, who are burdened with four feet?

No matter how late the men came in from work nor how tired they were, the horses never received a kick or blow. Often from my safe view-point in the park I trembled for blundering Big Jake, who made his way to the watering trough or to his stall regardless of who or what stood in his way; but somehow allowances were made and the dear old fellow went unpunished.

Mr. Dearcot seemed prosperous on the whole, but there were times when he would come in from the city pale and worn; it appeared that on such occasions no explanations were necessary for the faithful "home people" understood.

So the miracle of seasons came and went, each telling its story of the wisdom and kindness of the Great Master. Thus four years of my life passed away, but I did not regret them for they were happy, well-spent years.

The Little Ones

A Spring Alring.
All the good little kittens have washed
their mittens,
And hung them up to dry;
They're gray and fluffy, and soft and
muffy.
But it's time to lay them by;
And now that we've come to the spring
of the year,
They have them all out airing here;
And that is the reason, I do suppose,
Why this little tree that every one
knows,
By the name of Pussy Willow goes.
—Martha Burr Banks, in Good House-
keeping.

Once Upon a Time.
MRS. A. D. GRAY.

"I should guess there would be time for some more 'bout that farm, and those truly children," said Malcolm, climbing into my lap.

"Mary said in fifteen minutes dinner would be ready. Seems like when little boys have been out a 'bobbing' with their sleds for hours and hours, that fifteen minutes would be most long enough for them to get starved," and he sighed deeply.

"Oh, no! Little boys can go for days without a single thing to eat," I said.

"Fifteen minutes isn't anything. It won't hurt them in the least."

"It makes them feel all hollow like a cistern, anyway," said Malcolm. "But g'wan, muver; maybe I won't feel if I am starving."

"There is one think about that big, big farm that will surprise you. These four children, who lived there, didn't have a hydrant at the kitchen sink—to turn on the water—didn't have a well, either."

"Oh my, muver; how thirsty they must have been. Did they have to go down to the river, ever single time they wanted a drink?"

"No, they had something that little city boys know very little about. They had a beautiful spring down in their meadow. It was like a deep, deep well, and the purest, coldest water bubbled into it all the while from the hill. The grandfather had the sides lined with stone and a high stone wall built on three sides. Over the top was a large stone slab to keep out the dirt and leaves.

"It was ten feet deep, and it never went dry, but was a famous spring for

"I think the bon-bon tea she made

Soda Crackers and—

anything you choose—milk for instance or alone.

At every meal or for a munch between meals, when you feel the need of an appetizing bite to fill up a vacant corner, in the morning when you wake hungry, or at night just before going to bed. Soda crackers are so light and easily digested that they make a perfect food at times when you could not think of eating anything else.

But as in all other things, there is a difference in soda crackers, the superlative being

Uneeda Biscuit

a soda cracker so scientifically baked that all the nutritive qualities of the wheat are retained and developed—a soda cracker in which all the original goodness is preserved for you.

NATIONAL BISCUIT COMPANY

5¢

California

For a change why not make that visit to California early in the season? You'll enjoy it. Visit Grand Canyon enroute. Stop over and see the Petrified Forest. Ride through the country of fruits and flowers. Attractive and inexpensive variable route tours within the means of almost every one. About one-half the usual rate. Long limit and liberal stop-over privileges. I'll help you plan a trip. Tickets on sale April 25 to May 5, inclusive.

The Santa Fe is the line of fast trains, modern and comfortable chair cars and luxurious Pullmans, Harvey meals, rock-bailed track, block signals.



N. B.—Members of the Mystic Shrine and delegates to National Congress of Mothers, both to be held in Los Angeles between May 7 and 11, should take advantage of this offer Descriptive folder free.

T. L. KING, Agent, Topeka, Kansas

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. Blackman, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

him drink, so that he would not take cold helped him to remember too. For he told me years after this, when all four of the children were grown up, that he had never forgotten the bitter taste of that bone-set tea, nor the lesson of that afternoon.

"There, Mary says dinner is all ready, and my starving boy can have something to eat at last."

"I forgot I was starving," said Malcolm, springing down, "your 'truly' stories fill me up so, muver."

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literary Club, Ford, Ford County (1903).
Sabeau Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marion County (1902).
Women's Country Club, Anthony, Harper County, Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentis Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Miscellaneous Program.

KANSAS DAY.

Roll call—Quotations from Kansas writers.

- I. Kansas as a territory.
- II. Kansas as a State.
- III. Resources of Kansas.
- IV. Noted Kansas women.

I. The history of Kansas is most interesting reading especially to Kansans and, although this program would have been particularly appropriate for Kansas day—the birthday of the State—nevertheless it is a good subject at any time. To be a good citizen one should be familiar with the history of his own State. I am glad the history of Kansas has been made a text book in our schools. A great deal was crowded into the first 17 years of Kansas while it was a territory and history was made rapidly. They were decisive years and had much to do in shaping its future. If the paper under this topic were prefaced with a brief outline of its history previous to its becoming a territory, it would add to the interest and perhaps make it more comprehensive.

II. The first few years following the admission of Kansas into Statehood were full of peril and pathos. They included those dark days of the civil war—Quantrell's raid and internal wars. Afterwards time and attention were devoted to the building of the State interrupted only by some Indian wars and drouth and grasshopper raids. These two papers should cover a brief but complete history of Kansas.

III. Time and energy have proven that Kansas is not only a corn State, but that its resources are numerous and still undeveloped. It is surprising to one who has not investigated the subject to learn of the great number of natural products.

IV. The history of Kansas can not be written without writing of the noted men and it will not be necessary to include the men in this subject as they will be included in other papers. Kansas has her noted women—noted for their courage, wisdom, common sense—who were a power for good in the State, and a short sketch of some of them will be interesting.

The Madison Taka Embroidery Club.

Under the auspices of the Taka Embroidery club a birthday party was given Mrs. A. Hind on the evening of the 26th. Games of different kinds with cards were played, among them the game of five-hundred, under the kind management of Mrs. Austin Wash-

burn. The game of five-hundred was played by twelve, at three different tables, as a progressive game. Mrs. Filler and Mr. Washburn received first prizes; Miss Pearl Filler and Mr. A. Hind received the booby prizes. After the games were finished, refreshments were served by waiters dressed in pink with green paper caps and aprons, the club colors. The favor with each plate was a pink carnation, the club flower.

The woman whose voice is always controlled, who is gentle and moderate even in moments of great stress, who knows how to express a contrary opinion without giving offense or displaying personal animus, is the strongest woman in any club. I care not whether she holds office or not. At a woman's club the members, regardless of their social position outside, are all standing on exactly the same plane.

The Grange

*"For the good of our Order,
our Country and Mankind."*

Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master.....N. J. Bachelder, Concord, N. H.
Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary.....C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan
Overseer.....A. P. Reardon, McLouth
Lecturer.....Ole Hibner, Olathe
Stewart.....R. C. Post, Spring Hill

Assistant Stewart.....Frank Wizwell Ochiltree
Chaplain.....Mrs. M. J. Ramage, Arkansas City
Treasurer.....Wm. Henry, Olathe

Secretary.....George Black, Olathe
Gatekeeper.....J. H. Smith, Lone Elm
Ceres.....Mrs. M. L. Allison, Lyndon
Pomona.....Mrs. S. M. Phinney, McLouth
Flora.....Mrs. S. J. Lovett, Larned

L. A. S.....Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman.....Topeka, Station A
E. W. Westgate.....Manhattan
George Black, Secretary.....Olathe
Henry Rhoades.....Gardner
J. C. Lovett.....Bucyrus

STATE ORGANIZER.

W. J. Brynham.....Overbrook

Shawnee County Auburn Grange No. 499.

Editor Grange Department:—It is a pleasure to me to be able to report favorably in regard to Auburn Grange. It is in a very flourishing condition.

We have received by initiation since March 30, 1905, twenty-four members, almost doubling our membership during the year giving us a total of fifty-two members.

We have changed our place of meeting from the schoolhouse, which we have occupied since our organization, to a beautiful and commodious hall which we have rented. This hall gives us much better facilities for our ritualistic work, making the beautiful ceremony much more impressive and satisfactory.

For the vexed question of how to make the grange interesting, we discuss the questions submitted by the National Grange, also farm topics interspersed with readings and recitations, and by this means make our grange meetings very interesting.

We have discussed the question of the removal of all internal revenue duties on alcohol denaturized and rendered unfit for use as a beverage, thus placing it within reach of all for industrial purposes, furnishing to all a cheap light- and heat-producing material, and to the farmer a ready market for corn and other farm products from which alcohol can be obtained. We have sent a petition to our Congressman, Hon. Charles Curtis, stating our action and desire in regard to this question now pending in Congress.

The attendance at our grange meetings is large, averaging about two-thirds of our total membership which is above the average attendance of all secret societies, and a feeling of harmony permeates the entire membership.

We are making arrangements to have a competitive display of farm products in the fall, including corn, cereals, vegetables, fruits, etc., and for the ladies, butter, bread, and flowers.

The members of our grange are availing themselves fully of the fire-insurance feature of our order.

GEO. LUNN, Master.

Equity Grange No. 1111, Anderson County.

The last meeting of Equity Grange, held in March, was very successful and one that will result in much good to the grange in this locality.

We initiated twenty-nine new members and voted on a number of new applications for the next meeting. There was a large attendance of the

membership of Equity Grange. A large representation from Diamond Grange, No. 575, located at Haskell in this county, was present, also a large representation from a new grange recently organized at Welda, Kansas. We flatter ourselves that the ritualistic work on this occasion was ably and impressively rendered, and that our new members went to their homes fully realizing the useful lessons taught in this beautiful ceremony. The evening's work and pleasure was closed by a grand grange feast for which the order is noted, and a good social time was enjoyed by all.

Before closing this note I must say that our deputy, Brother J. H. Smith, is devoting a great deal of time to grange work in Anderson County. He organized the grange at Welda and is at work in the organization of another one at Colony. MRS. LETTIE MYERS.

Wea Grange No. 445, Miami County.

Editor Grange Department:—Wea Grange, No. 445, held an interesting meeting Saturday, March 31. It was an all-day session. The morning was spent socially after which we all partook of a feast of fried fish that had been very artistically prepared by our lady members. After this a session of the grange was held.

The good-roads question was a subject that occupied a greater part of the time of this meeting. Those taking part in the discussion favored and urged the use of the King road-drag. Some very good ideas were suggested in regard to the selection of seed-corn.

Wea Grange was organized August 22, 1873, and has grown from a small membership until we now have about 90 members. Brother J. C. Lovett, who is a very enthusiastic patron, is our master. He is a charter member of our grange and an ardent supporter of our order. Sometimes I think us farmers fail to realize the benefits we as a class receive from the Grange in general and our local granges in particular. Many of the conveniences we enjoy have been brought about by farmers' organizations, and especially by the efforts of the grange. Whenever the farmers become lined up and united, something has to move, some social, business, or political change is wrought. No other organization enables us to so readily and intelligently get together in our demands.

Let us all appreciate more the work of our subordinate grange. Try to realize the influence it has in our community, consider the benefits of its social meetings, and the good we have derived from the lectures and addresses of eminent persons who have visited us and talked to us upon subjects of vital interest.

Let us be true and loyal patrons. Let us stand by our home grange, attend its meetings, get interested in the work. Let us love our order for what it has accomplished for us and assist it in accomplishing more. Let us ponder well the question of where we would be without the grange in this day and age of gigantic organizations.

Bucyrus, Kansas. C. E. Z.

Woman's Work.

An Open Letter to the Masters of Subordinate Granges in Kansas:

We, your committee on woman's work, desire to call your attention to page thirty-one of the Journal of proceedings of the Kansas State Grange held at Madison, Kansas, in December, 1905. During this meeting a standing committee on woman's work was appointed by the State Master, and it is the duty of the master of each subordinate grange in Kansas to appoint a local committee on woman's work to take an active interest in all matters for the public good in the community, such as public school-rooms and grounds, also in matters pertaining to temperance and questions involving good citizenship. It will also be the duty of these committees to devise means for social entertainment in our subordinate granges and decorations for grange halls, plan entertainments and programs, picnics, etc., so that grange day will be looked forward to with pleasure. Masters will please appoint these committees and report to this standing committee as soon as possible.

MRS. LETTIE A. MYERS,
Chairman, Welda, Kans.
MRS. ALICE M. MUNGER,
Manhattan, Kans.
MRS. EFFIE A. SCOTT,
Larned, Kans., Committee.

Granges Organized in Three Months.

The number of Granges organized and reorganized from January 1, 1906, to March 31, 1906, both inclusive, is as follows:

Organized.—California, 2; Connecticut, 1; Colorado, 2; Illinois, 1; Indiana, 2; Iowa, 1; Kansas, 4; Kentucky, 4;

STOP, WOMAN!

AND CONSIDER
THE ALL-
IMPORTANT PACT



That in addressing Mrs. Pinkham you are confiding your private ills to a woman—a woman whose experience with women's diseases covers a great many years.

Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham, and for many years under her direction, and since her decease, she has been advising sick women free of charge.

Many women suffer in silence and drift along from bad to worse, knowing full well that they ought to have immediate assistance, but a natural modesty impels them to shrink from exposing themselves to the questions and probable examinations of even their family physician. It is unnecessary. Without money or price you can consult a woman whose knowledge from actual experience is great.

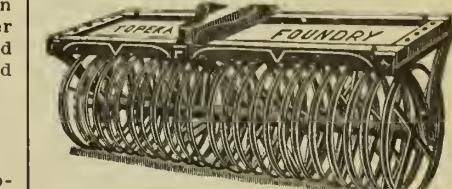
Mrs. Pinkham's Standing Invitation.

Women suffering from any form of female weakness are invited to promptly communicate with Mrs. Pinkham, at Lynn, Mass. All letters are received, opened, read and answered by women only. A woman can freely talk of her private illness to a woman; thus has been established the eternal confidence between Mrs. Pinkham and the women of America which has never been broken. Out of the vast volume of experience which she has to draw from, it is more than possible that she has gained the very knowledge that will help your case. She asks nothing in return except your good-will, and her advice has relieved thousands. Surely any woman, rich or poor, is very foolish if she does not take advantage of this generous offer of assistance.

If you are ill, don't hesitate to get a bottle of Lydia E. Pinkham's Vegetable Compound at once, and write Mrs. Pinkham, Lynn, Mass., for special advice.

When a medicine has been successful in restoring to health so many women, you cannot well say, without trying it, "I do not believe it will help me."

DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Pack surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

DEAFNESS CURED FREE 64 PAGE BOOK

TELLS HOW TO CURE YOURSELF
of partial or complete Deafness, Headaches, Ringing in Ears, Discharging Ears, Ulcers in the Ears and all other Ear Diseases, as well as Catarrh, Hay Fever, Asthma, at your own home. Book tells all about Deafness and other ear diseases; how to cure them. Tells how various constitutional diseases affect hearing. Gives all symptoms of approaching Deafness. Tells all about Headaches. Tells about artificial ear drums and how to prevent Deafness. Tells all about Catarrh. Book is free—write today. Address DR. W. O. COFFEE, 872 Century Bldg., Des Moines, Iowa.



ANYONE WISHING UNITARIAN SERMONS and PUBLICATIONS SENT FREE, may address Mrs. F. O. Leland, Concord, Mass.

AGENTS WANTED

Roll 1 bottle Sarsaparilla for \$3.00, best seller; 200 per cent profit. Write today for forms. F. O. Leland, 116 Lake St., Chicago.

Maryland, 1; Maine, 10; Massachusetts, 6; Michigan, 11; Minnesota, 8; New Jersey, 4; New York, 20; New Hampshire, 1; Ohio, 9; Oregon, 1; Pennsylvania, 18; Vermont, 7; Washington, 15; Wisconsin, 5; total, 133.

Reorganized.—Delaware, 1; Kansas, 6; Maine, 2; Michigan, 1; New Jersey, 2; New York, 2; Ohio, 2; Oregon, 1; Pennsylvania, 2; Washington, 2; West Virginia, 1; Wisconsin, 4; total, 26.

Agriculture

Pure-Bred Seed-Corn.

I would like your advice regarding seed-corn for this year's planting. Do you think it would pay me to buy pure-bred seed-corn to plant my whole field of about seventy acres, or would it be just as well to plant most of the field to common corn such as is grown around here and plant only a bushel of pure-bred corn so as to secure better seed for next year's planting? I shall have to buy most of my seed-corn this spring, as I saved only about two bushels of good ears.

I had thought of getting McAuley's White Dent corn. I want a corn that is not too late in maturing, as we have dry weather in the latter part of July sometimes, which might injure late corn worse than early. I am farming upland soil. Do you think it would be better to get seed grown on upland or would it be just as well to get seed grown on bottom-land?

Any information you may see fit to give me in regard to which variety of corn I had better plant and as to whether I should buy pure-bred seed or not will be gladly received.

Clay County. C. H. LONBERGER...

If you can get good home-grown seed-corn of some variety which produces well in your locality perhaps it may be advisable to plant your general crop with this kind of corn. In sending away for pure-bred corn you are not always sure whether the variety will be well adapted for growing in the new soil and climate. Seed-corn brought from another State or section of the State in which the climate and soil differ is apt not to produce as good crops the first season or two as the crop from home-grown seed of the same variety. It may usually be preferable, as you suggest, to secure only a bushel or two of pure-bred corn for planting the first season, and plant this corn in a field by itself, so that you can keep it pure. On the other hand, if some of your neighbors have already secured well-bred corn and have grown it for a few seasons, seed from such corn may be preferable to plant to planting other home-grown seed of corn which may be less pure in type. I do not advise to plant mixed corn.

McAuley's White Dent corn should succeed well in your section of the State, especially on upland. This is a hardy, vigorous-growing corn and a good producer. The McAuley's has ranked very high in the yield for the last two seasons compared with 80 other varieties tested at this station. Other varieties of white corn adapted for growing in your section of the State are the Hammett, grown by P. A. Hammett, Marysville, Kansas, also the Boone County White, and the Silvermine are good varieties of corn which have been introduced into Kansas from other States, but you should secure Kansas-grown seed if possible, especially if you plant this corn in large area.

For planting on upland I should prefer seed-corn grown on upland provided the corn is of good quality, fairly pure in type, and a variety well adapted for growing in that locality.

A. M. TENEYCK.

Cane As Green Manure.

Do you consider cane of any value as a green manure? JAS. R. PLUMB.

Lyon County.

We have never made any experiments at this station which give definite data as to the value of cane for green manuring, and I find no published record of the crop having been used experimentally for this purpose at other experiment stations. It would seem to me, however, that cane could be successfully used as a green manuring crop. My plan would be to sow late in the season, probably immediately after the wheat harvest. Last season we put a disk drill right behind the binder and when we had finished cutting the grain the field had been planted again to green manuring crops. In this trial we planted largely cow-peas, although some plots were planted with soy beans, sorghum, corn, Kafir-corn, rape, and small grain. Cow-peas made the best stand and the best growth last season. The sorghum did not make a good stand, but the growth was satisfactory when the crop was plowed under in the first part of September for green manure.

Perhaps the danger in using sorghum for green manuring will be that the sorghum may become too rank and too mature before it is plowed under. Also, it is not advisable to plow under sor-

ghum and plant to fall grains, rather plow early in the fall but plant to corn and cultivated crops the next season. This allows the sorghum to decay and the soil will settle and get into good seed-bed condition before planting to corn.

I refer you to a letter answering questions regarding the relative value of sorghum and cow-peas for green manuring published in THE KANSAS FARMER, October 19, 1905.

A. M. TENEYCK.

Experiments With Chemical Fertilizers at the Kansas Experiment Station.

EDITOR KANSAS FARMER:—During the past year there has been a great deal of inquiry from Kansas farmers regarding the use of chemical fertilizers. Some experiments have been carried on in the use of chemical fertilizers at this station during the past three seasons, with barley, oats, and corn, and experiments in fertilizing wheat were begun last fall. During the seasons of 1903 and 1904 trials were made only with nitrate of soda. In 1903 nitrate of soda applied at the rate of 200 pounds per acre at seeding time gave an increase in yield of barley of 4.8 bushels per acre, the yield from the fertilized plot being 20 bushels and from the unfertilized plot 16.2 bushels per acre, respectively. During the same season oats fertilized with 130 pounds of nitrate of soda per acre yielded 19.5 bushels, while the unfertilized plot gave a yield of 24.4 bushels per acre.

In 1904 nitrate of soda was applied to oats and barley at the rate of about 150 pounds per acre. As a result the fertilized barley yielded 35.2 bushels per acre and the unfertilized 17.7 bushels per acre, the yield of the fertilized crop being practically double that of the crop not fertilized. With oats the plot which was not fertilized yielded about 2 bushels more than the plot which received the fertilizer.

In 1905 nitrate of soda was applied to oats and barley at the rate of about 80 pounds of the salt per acre. During this season, also, we made experiments in the use of sulfate of potash and superphosphate fertilizers, these fertilizers being applied at the rate of 125 pounds per acre. In this experiment the barley which was fertilized with nitrate of soda yielded 59.9 bushels per acre, while the unfertilized check-plot gave a yield of 54.2 bushels per acre. The yield of grain from the plots fertilized with potash fertilizers and phosphate fertilizers was several bushels less than that received from the unfertilized plot. With oats the unfertilized plot gave the largest yield, the lowest yield being secured from the plot which was fertilized with sodium nitrate, namely, 32.6 bushels per acre. These experiments were carried on on land which was poor in fertility, being the upland soil of the station farm, which has received no manure for a number of years and which had been continuously cropped with corn and small grain. The land is very deficient in humus and nitrogen, thus there was a beneficial effect in the use of sodium nitrate, especially on barley, although the results were negative in the use of the fertilizer with oats, partly probably on account of the ranker growth of straw on the fertilized plots, which caused the oats to lodge worse than was the case on the unfertilized plots. These experiments with barley and oats are being continued in 1906.

Similar experiments have been conducted with corn during the past three seasons, as already described for barley and oats. No definite results were secured from the use of nitrate of soda on corn in 1903 and 1904. The results of the trial in 1905 were as follows:

Unfertilized corn yielded at the rate of 55 bushels per acre.

Corn fertilized with 100 pounds of nitrate of soda yielded 62.3 bushels per acre.

Corn fertilized with 250 pounds of superphosphate yielded 57.4 bushels per acre.

Corn fertilized with 200 pounds of sulfate of potash yielded 63.4 bushels per acre.

As a result of the single trial the use of the chemical fertilizers has given some increase in the yield of corn, barely sufficient, however, to pay for the fertilizer. These experiments in fertilizing corn are being repeated in 1906.

I do not, as a rule, recommend the use of chemical fertilizers in this State in the growing of wheat and corn and other standard farm-crops. Doubtless chemical fertilizers may be profitably used in the growing of special crops and in intensive farming, but Kansas lands are not yet so deficient in fertility but that by proper rotation of crops and the addition of barn-yard manure the soil may be maintained in good

cropping condition and continue to give large yields of corn and small grain. What our Kansas soil needs more than chemical fertilizers is rotation of crops. Too many farms have been cropped continuously with corn or wheat for too long a period, until the soil has become apparently exhausted in fertility and a change of crops in which grasses and alfalfa are rotated with corn and wheat and other small grains will again in part restore the fertility and improve the soil texture so that we may continue to produce large yields of grain without the use of chemical fertilizers.

A. M. TENEYCK.

The Importance of Sub-Packing.

Realizing the fact that few farmers comprehend the vital importance of the sub-surface packer, it certainly is not out of place in this number to devote considerable space to its merits.

In the first place, let us consider some of the practical demonstrations of the effect of packing the under portion of the furrow. The first experiment which really called my attention to sub-packing as the direct cause of increased yield was in 1883. In 1882 we had harvested the best crop of spring wheat I had ever seen in any section. This was in the northern part of South Dakota, the yield being more than 40 bushels per acre. The straw was long and stiff and the harvester was raised to the highest point in order that as little unnecessary straw as possible need be cut to handle.

In due time the field was cleared of the crop and the plowing done to a fair depth. On account of no rain that fall the soil was rather dry during the winter. Considerable snow fell, however, so that in the spring all of the plowed ground to the full depth of plowing was moist. Work of harrowing and seeding began as soon as the frost would permit. First, three horses were driven over the field attached to a harrow, second, two horses attached to a seeder, and third, three horses attached to the harrow the second time. Going over the field three times with these teams resulted in many hoof prints. Strange as it may seem, the only wheat that grew to any reasonable height and produced heads of grain was grown in these hoof prints where the weight of the horses had made the soil firm to the sub-soil below. In the remainder of the field the top soil was held up from the sub-soil by the long stubble that had been turned under the fall before.

Two years later we rented 160 acres and the seed was put in with an end-gate weeder, a device attached to the end-gate of a common farm wagon and driven by a sprocket wheel attached to the wagon wheel. In operating this one man drove the team and another man tended the machine, both riding. In addition to the weight of wagon and men there was also that of from four to six bushels of wheat carried. This total weight caused the wheels to firmly pack the soil to the bottom. Here again there was a marked illustration of the importance of sub-packing. The season being somewhat dry the stand of wheat in the field generally was thin and short, while in these wheel tracks it was at least a half taller, much thicker, and productive of a far better berry.

THE REASON WHY.

To clearly grasp the force or value of any scientific principle, it is necessary that we understand the reason why. The great difficulty we have to contend with in the growing of crops in the semi-arid sections is to be able to carry the crop through some prolonged dry period without damage to the crop. To add to the force of this let me say that many times during the early years of struggle for existence in North and South Dakota, I have heard men say that if rain had come one day sooner or two or three days or a week sooner their crops would have been saved.

In the face of the above facts it is apparent that we must do everything in our power to provide moisture in ample available quantities to carry these crops at least a few days longer than they would otherwise live.

The first step is to store ample moisture below the surface to supply the needs of the crop at any and all times. The next but equally vital step is to control this water, so far as it may be possible, by increasing the water-holding capacity of the soil and by increasing the power of capillary attraction and thus lifting the moisture as rapidly as possible from our storage house below up to the soil in which the main feeding roots of the plants carry on their active work of gathering the necessary plant elements. This is all brought about by thoroughly knitting

The Government of Canada

Gives absolutely FREE to every settler

160 Acres of Land in Western Canada

Land adjoining this can be purchased from railway and land companies at from \$6 to \$10 per acre.

On this land this year has been produced upwards of twenty-five bushels of wheat to the acre.

It is also the best of grazing land and for mixed farming it has no superior on the continent.

Splendid climate, low taxes, railroads convenient, schools and churches close at hand.

Write for "20th Century Canada" and low railway rates to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent.

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.

Mention this paper

A Home For Half the Money

In the Pacific Northwest. A handsomely illustrated 88-page book,

"OREGON WASHINGTON IDAHO AND THEIR RESOURCES"

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig,

ROOM 212 WORCESTER BLDG.,

PORLAND, OREGON.



FREE Flower seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK FRUIT BOOK

shows in NATURAL COLORS and accurately describes 216 varieties of fruit. Send for our terms of distribution.

SEEDS

That will Grow PLANTS

None better, even at the high prices. Special bargains. SEEDS, 10 pks.

Annual Flowers, 10c; 5 pkts. Vegetables, 10c. PLANTS, 6 Rees, 25c;

Geraniums, 25c; 6 Begonias, 25c; 4 Pelargoniums, 25c. My catalog prices will surprise you. Catalog and packet Royal Giant Pansies free.

A. C. Anderson, Columbus, Nebraska.

SEED CORN

Beebe County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigreed and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.

Manchester, - - - Illinois

Iowa Produces the Best

SEED CORN

and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 34, Farragut, Iowa

World's Premium Seed Corn, HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri

and firming the seed-bed and root-bed. In addition to controlling the moisture, this packing of the lower portion of the furrow slice also facilitates a more liberal growth of roots and rootlets and increases the available supply of nitrates and bacteria. All this providing the surface is kept loose to admit air and prevent the loss of moisture by evaporation. The packing of the lower portion of the furrow slice is not only important in increasing the yield of the crop you plant this year, but if the work is properly done even on quite sandy soil, it absolutely prevents the soil from blowing.

Some advantages of deep plowing and sub-packing, then, are these:

(1) It increases the water-holding capacity of the soil.

(2) It increases the upward movement of moisture by capillary attraction.

(3) It facilitates the development of available nitrates and bacteria.

(4) It makes it possible for the little hair rootlets or feeders of the main lateral roots to permeate this soil in every direction.

(5) With these four combined conditions and with water previously stored below, it is possible for the plant to resist the ill effects of any dry period common to the most arid sections.

(6) With the above five conditions present the farmer is assured of a very much larger crop than otherwise when proper cultivation is given, and finally the presence of these conditions and their results very greatly increases the profits of the farmer who carries out their provisions as outlined.—H. W. Campbell, in *The Scientific Farmer*.

Horticulture

Don't Make Garden in a Day.

J. C. Whitten, horticulturist of Missouri University, gives the following timely suggestions for garden-making:

"If the garden is planted all in a day, to get the disagreeable job out of the way, it is probable that only one or two species of plants will do their best. Some will have been planted too early and others too late.

"For best results in garden-making each kind of plant should be put out at the time when conditions are best suited to it. Lawn grass-seed, sweet peas, parsnips, onions, spinach, and some other species should be planted as soon as the soil can be worked in spring. Seeds of all these will germinate, and even make stronger growth, when the soil is only a few degrees above freezing. If it freezes more or less on cold nights after they are planted, no harm is usually done.

"Other plants like nasturtiums, candytuft, beets, potatoes, carrots, etc., have a larger heat requirement and should be planted in mid-spring, or at least later than the first mentioned list. They will not endure well if put out on the first days when the ground begins to thaw out, but they should be planted before the soil gets very warm.

"Corn, beans, melons, cucumbers, tomatoes, and many others require a warm soil and time will be gained if they are not planted until the soil is well warmed up to a considerable depth.

If put out too early, the seeds are liable to decay in the soil. Even if the plants do grow they will become stunted by the cold and will not develop into good plants. It saves time to plant these warmth-loving kinds after the soil is warm.

"Some species need a great deal of heat. These are lima beans, okra or gumbo, eggplants, and some others. They should be the last vegetables planted. Still other species should be planted at intervals so as to get a succession of vegetables for the table. Most kinds which grow quickly may be planted in succession. Radishes, beets, lettuce, peas, and many others are best only when they are tender and succulent. Seeds of these may be planted every three weeks for a time, so as to have them tender during the first half of the season.

"No date can be mentioned for planting the different sorts. Seasons differ. It may be warmer one year on the first of April than it is two weeks later another year. If one will watch the starting of leaves and flowers on early species of trees and shrubs, he can get an index as to the time to plant. To plant sweet peas when the willow catkins are coming out is a good rule and similar comparisons may be made for other plants. This is accurate for

SAVE ALL THE GRAIN YOU GROW!



Let Us Reason Together

BETWEEN seed time and harvest, the grain grower has to trust very largely "to luck."

Nature makes the crop in her own way.

But when harvest time comes he must "get busy."

His profits then depend upon the wisdom with which he harvests his grain.

The wise man begins to get ready weeks before the actual time of harvest.

He knows he can't "trust to luck" then, and he does not want to be caught unprepared.

The first thing he does is to make sure that he has the right facilities for harvesting—the right kind of machines for the proper cutting of his grain.

He wants to get every spoonful of grain that Nature has given him.

He wants to get it with

- the least delay in time;
- the least labor on his own part;
- the least hardship on his horses;
- the least likelihood of trouble and annoyance.

He cannot "trust to luck," and certainly he cannot trust to a poor harvesting machine, a worn-out harvesting machine or an *uncertain* harvesting machine.

How about *you* and your harvest?

If you are a businesslike farmer, you will get ready for harvest now.

Go to a dealer who handles any one of the International line of harvesting and haying machines.

Get a catalogue, look at the machines, study their construction, and you will *see for yourself* that they are built to meet every requirement.

In principle of operation—in design—they embody all that the most skilled mechanical experts have discovered in the past 50 years.

In materials they have lumber, steel and iron of the highest grade only—the selected products of the manufacturers' own mines and mills, produced for the purpose of harvesting machine building.

In workmanship, it is the product of the best facilities that money and experience can produce.

In everything that makes a machine reliable, trustworthy, durable and efficient, the

Champion
Deering
McCormick

Milwaukee
Osborne
Plano

Harvesting and Haying Machines, represent the highest grade of excellence.

These machines have been before the public for a long term of years—some of them for more than half a century. Other machines—scores and scores of them—have come and gone. These have remained, growing every year in popularity. Is the stamp of approval placed on a machine by the farmers of America and grain growers of the world worth anything?

Is it not certain that their popularity has been merited? Men do not buy machines year after year, unless the machines do satisfactory work.

To-day the standard harvesting and haying machines embraced in the International line, are better than ever before, because they are the products of riper, richer experience, more expert skill, and better and greater facilities for manufacture than were possible in the past.

The manufacturers of these several machines, by close co-operation, are able to own, control and operate their own coal mines, iron mines, lumber camps, coke ovens, steel mills and other sources of supply, producing their own materials, under their own supervision.

They get these materials when they want them, not being dependent upon uncertain and fluctuating markets; they get them of the right quality.

By co-operation they are enabled to employ the most expert skill in designing improvements and in the actual manufacture of the machines.

By co-operation they are enabled to employ extra facilities for the economical production of machines of the highest quality, facilities which are impossible for an individual manufacturer.

By co-operation they are enabled to surpass even their proud records of the past.

—If you expect to save *all* your grain;

—If you want a harvesting or haying machine on which you may depend with absolute certainty;

—If you want to be free from "break-downs," delays, and repair bills;

Take a little time, go and talk to an International Agent.

Inspect the machine he handles and get a catalogue.

It will pay you whether you buy this year or not.

If you don't know an International dealer—write to us for the name and address of one nearest you.

International Harvester Company of America, Chicago.

(Incorporated)

INTERNATIONAL LINE.

Binders, Reapers, Headers, Header-Binders, Corn-Binders, Corn-Shockers, Corn-Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Sweep Rakes, Hay Loaders, Hay Stackers, Hay Balers, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons and Binder Twine.

the willows start, not on a given day in March, but when they have received heat enough to grow well."

INTERNATIONAL SUNDAY SCHOOL LESSON.

John 2:1-46; Luke 7:11-17; 8:41, 49, 56.
Christ's Life: Lessons from His Resurrection Miracles.

It was part of the mission of Jesus to emphasize the reality, importance, and permanence of things spiritual, as opposed to things material. To this end some of his most impressive parables were spoken, as for example that concerning the man whose soul was required on the very day on which he

proposed to build larger barns in which to place his goods (Luke 12:13-21). Jesus' miracles in which the dead were restored to life are especially designed to emphasize the same truth. They do it most effectively. They amount to a demonstration. The reappearance of the spirit in the body after death proves beyond controversy the indestructible character of the spirit. The spirits so restored had evidently survived the incident of death. There are significant gradations in Jesus' miracles of raising the dead. He worked the miracle on the body of a little girl as it still lay upon the couch in her boudoir (Luke 8:41). He worked it upon the body of a young man as it

was being carried to the grave (Luke 7:2). He worked it upon the body of an adult which had been three days in the tomb (John 11). It has been commonly agreed that these miracles were wrought to prove Jesus' divinity. May it not rather be suggested that their chief design was to prove man's divinity. They are an object lesson. In a startling and irrefutable way they show the indestructible and imperishable quality of the human soul. Science, so long supposed to be in hopeless antagonism with religion at this point, has lately changed its note. The most recent and authoritative utterance discount the materialism which denies spirit in God or man.

Dairy Interests

The Profitable Dairy Cow.
PROF. C. S. PLUME, OHIO STATE UNIVERSITY.
(Continued from last week.)

CHANGES IN THE HERD.

As the months rolled by, it became clear to father and son that radical changes must be made in that herd. The cows showed an average for the herd at the end of the first year of only 180 pounds of butter-fat each, which at 25 cents a pound yielded a gross return of \$45.00. The feed and cost of keep ran up to \$40.00 each, so where was the profit? And the scales and Babcock showed that some of the cows were boarding at the expense of the Winslow family. It was interesting, for the fact is, these robber cows lacked dairy type. John discussed them with his father. There were six of them, and he showed them up in their true light. Pointing to one of them, she had made only 2,000 pounds of five per cent milk that year, he said, "Look at her beefy thighs and smooth meaty back. She hasn't any room between her thighs there for an udder anyway. The sooner we get rid of her the better off we'll be. Then take old Speckie. She never did have any belly, and her bag is all cut up in front so her fore teats are three inches above the others. She isn't a good feeder, and a poor feeder never made a good breeder or milker. Let's cut down the whole herd by throwing out these six. It's money in our pockets." Old man Winslow saw the wisdom of this proposition. He couldn't think of any argument quite equal to the facts produced by scale and Babcock test. Furthermore the arguments on cow-shape which John and Haecker presented were invincible. So the cows were sold.

You have heard the saying that "blood will tell," and that "every man has a right to be well born." Scientific men apply this to the beasts of the field as well as to the man who directs their destinies. The Winslow family had little surplus money. It was representative of many a hill family in worldly goods. Things must be accomplished gradually. But Mr. John Winslow had not forgotten his lessons of other days. He had studied pedigrees as a student. He had learned of famous cows and great sires. Had not thousands of purebred dairy cows records of 14 or more

So the hunt for a bull began, and it ended in the purchase of an animal of a style and quality that neighborhood had never seen before. He was a breeder, as had been his sire before him, and his calves showed constitution, style, and quality.

The second year the Winslow herd averaged 250 pounds of butter and things were generally improving. The old gentleman began to see more uniformity in the cows, in style and make-up. The calves he said were just like so many peas. They used to wonder what sort of milkers the heifers would develop into. Then began the study of calf-form, and caif-udders. It was seen that some of the calves had not only well-developed udders, extending out front and behind, but they also had the thin thighs so essential for room between. Those were good signs, thought John.

CLASSES OF DAIRY COWS.

In New England more than elsewhere in America, feeding stuffs are high in price, because in the main they are produced far away on the fertile lands of the West. The farmers bought prudently of grain, and many gave painstaking study to the relative cost of feed stuffs and their value in combinations. There were men about Rockdale who were intensely interested in what they fed their cows; but they had not reached the point of learning whether they were feeding profit-producing cows or not. Winslow senior always watched the grain bin, much as did his neighbors, but until his son brought new ideas to his attention, he had quite overlooked the significance of the individuality of the cow. The Minnesota experiments of Haecker had interested him greatly. Later on, Prof. Beach, of the Connecticut Agricultural College, published some experiments of the same kind, that he thought were even more telling than those of Haecker. Beach had 50 cows, which he divided into three groups. There were 35 classed as of the dairy type, which from the pictures resembled some in their own herd, which John said had the proper shape. Some others had shallow bodies and lacked belly and digestive capacity, while eight others were smooth and fleshy in type. These cows had credited to them 103 annual milking records, 80 of which were produced by those of the dairy type.

The results secured show clearly and decisively that the dairy type was the money maker. The little pamphlet which contained this report expressed it in figures this way:

Number cows.	Cost of food.	Yield butter fat, pounds	Profit.
Dairy type.	35	\$54.43	301
Shallow body type.	7	49.42	201
Fleshy type.	8	50.50	206
			\$28.09
			5.81
			6.09

pounds of butter-fat in seven days? Had not the descendants of Golden Lad, King of St. Lambert, Paul DeKo, Sarcistic Lad, American Champion, and others proven the unquestioned value of blood? They certainly had. "And blood, blue blood if you please, was wanted in the herd," said Mr. John Winslow to his father. Said the son: "Father, we have never had the influence of a good bull in our herd. We have the common-grade stock of our neighbors. It has brought us nothing of value. The calves are without merit, and the heifers are like the other poor ones of the community. We have gotten rid of six of the herd. Let's buy a young bull that we can use on the remaining cows, that will bring us something worth having. Let's buy a bull from a splendid pure-bred cow of dairy type, sired by a bull that has proved himself a breeder. Think what it means! Too many men think only of the cost of a bull in money. The value of a bull is measured down through future generations. The first calves have 50 per cent of his blood, and if he is a good breeder he should wonderfully tone up our herd and greatly add to our milk and butter record. This is simply the experience of the best breeders in history. We can use this sire on our herd and the stock of the neighbors for two or three years, and then sell him while he is vigorous and valuable, and then buy another not closely related to him to breed on the old cows and their daughters. Instead of buying a \$20.00 grade bull, let us seek a pure-bred one, that is a good individual and well bred, and pay the price. We ought to get a good one for our purpose for \$100, but let's get the right one anyway."

If you have a son, a partner of yours, who is earnest, business-like, industrious, and intelligent, you had better do as old man Winslow did, and let him take the lines in his hands. If you don't the chances are you will be sorry.

Young men of energy and brains, no matter what their business, want to know what the other fellow is doing and how he does it. This has a general application, irrespective of business. The farmer's institute grew out of this feeling. The Institute is an educational medium to help farmers. Under right conditions, it introduces new ideas into a community. Consequently, when the first institute was

held, it was a success.

John Winslow had a son, John Jr.,

who is a good example to all.

John Jr. is a good example to all.

STIFF AND SORE

from head to foot? Can't work today, but tomorrow you can, as the Old-Monk-Cure

**St. Jacobs Oil**

will soften and heal the muscles while you sleep.

It Conquers Pain

Price, 25c. and 50c.

held at Rockdale, the Winslows took a lively interest. They could not help it because the dairy cow was up for discussion. The principal speaker was a great dairy authority, who had two characteristics of a delightful sort. Next to telling a good story, he most enjoyed talking about the cow. He told some mighty truths, even if he did say that whenever he saw a cow he wanted to take his hat off to her as though she were a lady. John got some new inspiration from him, and came away surer than ever that he was working in the right direction.

Five years after John's return home the herd had come up to an average yield of 350 pounds of butter-fat, and the three-year-old heifers were beauties, for the bull first bought had proven a great breeder. He was sold for almost what he cost to a neighbor and then another of the same breed of somewhat different blood-lines took his place. He was of the same type and character, and thus they hoped to continue the uniform development of the herd. It gratified John not a little bit that a neighbor should want to own the old bull, for it meant that the gospel of good breeding was spreading in the community.

The health of their stock had been good ever since the new administration began. The lessons which he had learned from the college veterinary instructor had been helpful on occasions, and simply emphasized the useful character of his training during those four years. Milk-fever, the dread of all dairy-cattle men, had visited him but a little. His motto was, "An ounce of prevention is worth a pound of cure," so he fed cooling, laxative foods before and after calving, kept the cows clean and in healthy condition, and

then acted quickly if sickness occurred. Later on in his career, when he had many heavy milkers, he adopted the method of injecting sterilized air into the udder when milk-fever occurred and with highly-gratifying results.

As the herd grew in age and quality, the subject of future improvement was never lost sight of. Good dairy literature found its way onto the sitting-room tables, including both experiment station publications and dairy and live stock journals.

(To be continued.)

The Apiary**Transfer Bees to Modern Hive.**

EDITOR KANSAS FARMER:—Will you please tell me how to move a swarm of bees from an old hive into a new one? They were put in an old box two years ago, and I wish to take them out of this and place them in a new hive. Can any one tell me how to do it?

Lyon County. J. R. COOK.

In answer to the above inquiry will say that a movable-comb hive should be used as a new home for the bees in question.

Cut or split sticks one-fourth of an inch in diameter and long enough to reach one-quarter of an inch above and below the frames. Notch the ends of these splints and fasten them in pairs at one end with wire as far apart as the top bar of the frame is wide. Prepare 12 or 15 pairs of splints so as to have them in readiness for use when the combs are to be transferred from the old box hive. Wrap a cotton rag around the end of a stick, say 12 inches or more in length. Set fire to it and blow smoke from it into the hive where the bees now are in order to alarm them, and at the same time pound on the hive. The smoke and pounding will alarm them and they will in a few moments fill themselves with honey from their stores and will then not be cross. As soon as they have been thus treated, which will require not to exceed five minutes, turn the box or hive mouth upwards and place over it an empty box or nail-keg as a place to receive the bees as you drive them out. Wrap a cloth around the hive and box at the place where they come together, then with a hammer or club drum the old box for say 10 or 15 minutes and at the end of this time the principal part of the bees will have gone up into the keg or box placed above the mouth of the hive. Then gently set the box containing the bees on the old stand occupied by the old hive. Try off the side of the old hive and carefully cut out the combs, keeping a close outlook for the queen as she may not have gone out with the bulk of the bees. If found, put her in the box into which the bees have been driven. Lay a frame from the new hive on its side on a table or board. Cut and fit the combs into it. Save all the comb possible that contains brood or unhatched bees. Small pieces not larger than 2 or 3 inches square may be cut and fitted in the frames, side by side, until the entire box is filled. But, as a rule, there will not be many if any of these small pieces to look after as the combs will most likely be in larger pieces. I have often found one comb that would fill an entire frame. When a frame has been filled, as above outlined, slip one of the splints under the frame and the other one under the top, then fasten the splints securely at both ends. Put on as many pairs of splints as are required to hold the combs in position. Then lay the frame in the new hive. Pursue this course until all the comb has been transferred. I would, however, advise leaving out all drone combs or about so, as the presence of a large amount of drone comb causes many drones to be reared, and as they are not required in large numbers, the rearing of them should not be encouraged. When all the combs have been transferred to the new hive, place it on the old stand and hive the bees just as you would hive any other swarm. In one or two weeks the combs will be firmly fastened to the frames of the new hive, and the splints may be taken off. In case there is little or no honey in the combs that have been transferred, the bees should be fed a syrup of granulated sugar, made by dissolving ½ of a pint of sugar in ¼ of a pint of water. This syrup may be fed to them by setting the cup containing it over the frames and under the top cover of the hive. Now while the fruit-trees are in bloom is a good time to transfer bees.

Rice County G. BOURNE.

BUYING A CREAM SEPARATOR

Thousands of dairy farmers are buying a Cream Separator this spring. The purchase of a separator is a most important investment. Great care should be taken to make no mistake.

The Cream Separator is much different from any other farm machine. It either wastes or makes money twice every day in the year, and it may last from two to twenty years, according to the make of machine.

There is a big difference between the DE LAVAL and other Cream Separators, notwithstanding much the same claims are made for all "on paper," and some of the biggest claims for the poorest and trashiest machines.

DE LAVAL machines skim cleanest, have the biggest capacities, do the best work under every-day use conditions, produce the best cream and make the best butter, so that there is easily a difference of from \$50—to \$150—per year between the benefits and savings of a DE LAVAL machine and a poor one.

Then DE LAVAL machines are made up of much the best material and workmanship and last at least twenty years, with small cost for repairs, while other machines last only from two to ten years and cost a great deal meanwhile.

If the buyer wishes to be guided by the best authority and the best experience of others he must purchase a DE LAVAL machine, and he can surely make no mistake in doing so.

98 per cent of the creameries of the world, which have been using Cream Separators for twenty-five years, now use DE LAVAL machines. Almost every prominent dairy user does so. 700,000 farmers scattered all over the world, or more than ten times all others combined, do so. Every important Exposition for twenty-five years, ending with St. Louis in 1904, has granted the Highest Honors to the DE LAVAL machines.

DE LAVAL machines prove their own superiority. There are agents in every locality whose business it is to supply machines in this way and who are glad of the opportunity to do so. They set them and start the user right, which means a great deal in the profitable and satisfactory use of a separator.

While there is an ample discount for cash, if the user can't conveniently buy in that way he can do so on such liberal terms that the machine actually pays for itself by its own savings.

There is no reason why every farmer having cream to separate should not buy a separator this year, and there is surely overwhelming reason why it should be a DE LAVAL.

A new DE LAVAL catalogue to be had for the asking will interest everyone thinking of a separator.

The De Laval Separator Co.

RANDOLPH & CANAL STS.,
CHICAGO.

1213 FILBERT STREET,
PHILADELPHIA. 74 CORTLANDT STREET

9 & 11 DRUMM STREET,
SAN FRANCISCO.

General Offices:

109-113 YOUNVILLE SQUARE,
MONTREAL.

75 & 77 YORK STREET,
TORONTO.

14 & 16 PRINCESS STREET
WINNIPEG.

Get the Cream

GET IT ALL. GET THE LAST DROP. BUY DIRECT FROM THE FACTORY AT FACTORY PRICES AND SAVE

20% to 50%

It's to your interest to know about the liberal selling plan of the

Davis Cream Separator

No other skimming device known so surely gives you all the cream, and none does it with so little work. It is absolutely the easiest and easiest running separator. Only 3 pieces in its build. Think of the ease of keeping such a bowl clean. It never gets out of balance. The tank is only belt high, no high lift. You should know all about the Davis. Investigate before you buy. Write to-day for money saving catalog No. 126.

DAVIS CREAM SEPARATOR CO.,
540 North Clinton St., Chicago, Illinois.

**FOR SALE**

At a bargain, one Davis No. 3 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

Combination Thief - Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy whip complete without one. Price, \$1; postage paid. E. T. Davis Co., Tippecanoe City, Ohio. Send your orders haled.

A Reward FOR THE Man Who Milks

The man who ships his cream direct is rewarded for quality. He stands alone. He doesn't have to bear the burdens and suffer for the mistakes and carelessness of his neighbors. If your cream is clean and not too sour and good flavor, you get the highest grade and the best price. If your facilities for handling your cream are better than your neighbor's and you can keep it longer you need not ship so often. Consequently you economize on time.—"Time is money."

Everything favors the individual shipper.

Our system takes care of him. Our factory is his natural home.

Send us your cream and we'll send you the money.

Respectfully,

BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.

POULTRY BREEDERS' DIRECTORY.

THOROUGHBRED BLACK LANGSHAN EGGS FOR SALE—75 cents per sitting. Two or more sittings at 62½ cents per sitting. Address Morris Bond, Rossville, Kans.

BARRED ROCK EGGS—Heavy winter laying strains. Pen No. 1, \$1.50 per 15. Pen No. 2, \$1 per 15; \$5 per 100. Mrs. W. M. Schreler, Aragonia, Kans.

BUFF ROCKS—From fine stock. Eggs \$1.50 per sitting. A few good cockerels, \$1.50 each. M. Madden, Mound City, Kans.

SILVER WYANDOTTES EXCLUSIVELY—Eggs from State Show winners, 15 for \$2. Farm range Silver, 100 eggs, \$1. Mrs. J. W. Gause, Emporia, Kans.

BARRED PLYMOUTH ROCK EGGS—From large, beautiful, pure-bred chickens, only \$1 per 15; \$5 per 100. Mattie Shearer, Frankfort, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1 each. Eggs, sitting \$1.50, for incubators, \$5 for 100. Address Ben Warren, Maple Hill, Kans.

FOR SALE—Silver Laced Wyandotte eggs; farm raised, \$1 per 15; \$4 per 100. Cumberland raspberry plants, \$6 per 100. Frank Rice, Wathena, Kans.

COLLEGE HILL BARRED ROCK FARM—Prizes won 1906. Wichita, 100 competing, 1, 2, 3, 4 pens. 1, 2, 3, 4, cockerels, 1, 5 pullets, 1 cock, 1, 2 pens; Oklahoma, 1, 2 hens, 1, 2 pullets, 1 cockerel, 1 cock, 1 pen. Judges McClure and Emery. Stock and eggs guaranteed. Mrs. J. T. Woodford, Wichita, Kans.

WHITE PLYMOUTH ROCKS exclusively. Eggs \$2 per 15; \$8 per 30. All orders given prompt attention. R. C. Capron, Route 7, Winfield, Kans.

S. C. B. LEGHORN EGGS—From first cockerel at the State show, \$2.50 per 15. Other pens \$1 per 15. Mrs. Siler Seal, Meriden, Kans.

R. C. B. LEGHORN EGGS FOR SALE. Stock from best laying strains \$1 for 15; \$5 for 100; best selected and fresh eggs. Mrs. Bertha Evans, Route 4, Box 32, Lyons, Kans.

WHITE WYANDOTTES—the lay all winter kind. Best to high score, large egg record cockerels. Dusky strain. Eggs 5 cents each. \$4 per 100. J. L. Moore, Eureka, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—Eggs, \$2 per 15; \$8 per 30. All orders given prompt attention. R. C. Capron, Route 7, Winfield, Kans.

BARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns, S. Spangled Hamburgs, S. C. Black Minoras. Prize-winners in every pen. Eggs, \$1 per 15. Vira Valley, Kinsley, Kans.

BLU LEBIRD—Parred to the skin. Hawkins Bluebird strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kansas.

EGGS FOR HATCHING from my flock of pure-bred B. P. Rocks. Pullets scoring 93; flocks headed by males scoring from 90½ to 92½. \$1.25 per 15; \$6 per 100. Incubator orders a specialty. Eggs carefully packed. Address Mrs. Chas. Ainsworth, Eureka, Kansas, Route 1.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Heftich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale; also a few cockerels. Bertha Gresham, Bucklin, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94½ to 96½. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kans.

PARTIDGE COCHINS—Toulouse Geese, pure-bred; farm raised. Eggs \$1 per 13 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Kellerman, "Vinewood Farm," Mound City, Kans.

FOR SALE—Throughbred Gold-laced Wyandots. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by Standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

BARRED PLYMOUTH ROCKS—Bradley strain, pure winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 \$3.50. H. F. Brueggemann, Route 2, Herlongton, Kans.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00 from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK EXCLUSIVELY—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

BARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Gallath, White City, Kans.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Rostwick, Route 2, Hoyt, Kans.

GREAT BIG S. C. BUFF ORPINGTONS are the winter avers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandalia, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

EGGS, EGGS—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 15 for \$1. Muscovy duck eggs, 1 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White grin-necked hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE PLYMOUTH ROCKS—12 years breeders of choicest birds. Eggs \$1.50 per 15. American White, P. R. Club. J. E. Shinkle, Lakin, Kans.

THE KANSAS FARMER**The Poultry Yard**

Conducted by Thomas Owen.

Lice On Chicks.

EDITOR KANSAS FARMER:—Could you tell me what to do for my little chicks? They seem well for a week or two and eat well and of a sudden they spin like a top and die in a few minutes. I feed them cheese, hard boiled eggs, beans, peas, corn-meal, and plenty of onions all mixed for a meal. A. K.

Pfeifer, Kansas.

Answer.—Your chicks act as if they were troubled with the large gray head lice so common to young chicks. They bore into the head of the chick causing dizziness and apoplexy. Grease the heads with grease into which has been mixed a few drops of carbolic acid. See answer to Ellis County subscriber in regard to feeding grit to young chicks.

State Turkeys.

Do you know where I can get eggs of full-blooded dark gray turkeys? I would like to get some eggs as quickly as possible. If you know where I can get them will you please let me know?

Cloud County. J. E. MAILHOT.

Answer.—Our correspondent wants what are known as State turkeys. Breeders of same would do well to advertise them in THE KANSAS FARMER.

Indigestion In Chicks.

EDITOR KANSAS FARMER:—Will you please give in the columns of your paper the causes of little chickens dying. They are strong and healthy when they hatch out but in a few days their bodies and feet shrink to nothing and they eat until they die. They are not lousy nor bred in. I feed them cracked corn wheat and boiled meat, sweet milk and clear water. Ellis County.

A SUBSCRIBER.

Answer.—The one great cause of mortality among young chicks is indigestion. This is caused, not from a lack of any kind of food, but because they are fed and pampered too much. They are fed too soon after they are hatched. For at least thirty-six hours they do not need any feed, it being necessary for them to fully digest the yolk of the egg which they absorb just before hatching. Another most essential thing is that chicks should have plenty of small sharp grit. Before feeding them anything else let them take all the grit they will and keep it constantly before them. If you have not the regular chick grit, coarse sand will take its place though not as good as the grit. This and plenty of exercise ought to make your chicks thrive. Of course, you must look out for lice and grease their heads and under the wings occasionally with any kind of grease mixed with a few drops of coal oil or carbolic acid.

Feather-Eating Fowls.

My chickens are losing their feathers around the neck. I concluded it must be a parasite and washed the parts with an emulsion of thin soap, carbolic acid and sulfur, but it had no effect.

My poultry house is as clean as lime and lime-wash can make it. The roosts get a frequent painting with clean grease mixed with crude coal-oil. The roosts are planed 2 by 4 scatlings. The chickens are healthy otherwise and are doing well. Can you give me cause and remedy through THE KANSAS FARMER? MRS. J. M. YOUNG.

Leavenworth County.

Answer.—If the loss of feathers is not caused by parasites it may be caused by feather-eating fowls. This habit in fowls when once acquired is very difficult to break though feeding lots of meat will help the difficulty. Salting their soft food will also help dispel the craving for feathers. It is the blood in the quill they are after as it has a salty flavor. Too many roosters with a flock of hens will often cause the hen's head to be picked clean of feathers. The remedy for this is to allow only one rooster to each dozen of hens.

Poultry Pointers.

A dust bath is essential to fowls' health and happiness. By it they scour off the scurf and scales from the skin and rid themselves of vermin. The finer, lighter, dryer the dust the better, because the dust must be light and fine to get into the lice to kill them. It is much easier to provide dust baths so as to keep the lice from appearing than to get rid of them after they once get a good start. Sandy loam is often better than sand or some kinds of road dust which are coarse and

POULTRY BREEDERS' DIRECTORY.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Collie pups. W. B. Williams, Stella, Neb.

EGGS FROM MAMMOTH BARRED PLYMOUTH ROCK CHICKENS \$1.50 per 15. A. D. Wyncoop, Bendena, Kans.

S. C. B. LEGHORN SPECIALIST—Breeder 22 years. Utility and exhibition stock or eggs—\$1 per 15, \$4 per 100. Circular free. Gilt-edge Poland Chinas. A. B. Hoffman, Reece, Kans.

BLACK LANGSHANS—Hens scoring 93 and upwards-headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, sired by a pure breed cock. I have an orchard flock of 60 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Ralt, R. R. 4, Junction City, Kans.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kans.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

SILVER LACED WYANDOTTES—Throughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

EGGS FOR SALE—S. C. B. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emden geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minoras cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Artz, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93½ to 95½, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

WHITE WYANDOTTE COCKERELS, (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show. O. C. Sechrist, Meriden, Kansas.

SILVER LACED AND WHITE WYANDOTTES \$1 per sitting of 15. Eggs guaranteed. Circular free. R. C. Macaulay, Route 1, Frederick, Kans.

Buff Leghorns S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Ks.

HIGH CLASS POULTRY Silver Wyandotte, White Wyandotte, and White Plymouth Rock Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

Neosho Poultry Yards Rose Comb R. I. Reds; score 90 to 94½ points. Eggs from yard No. 1, \$2 per 15; others, \$1.50. Single sittings, \$6 per 100. J. W. Swarts, Americus, Kans.

LIGHT BRAHMAS More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver.

Blue Mound, Kansas.

Eggs for Hatching M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. G. Gerritt, Emporia, Kansas.

W. P. ROCKS EXCLUSIVELY Eggs for hatching 15 for 75 cents; 50 for \$2.

MRS. ALICE PERKINS, Munden, Kansas.

BUFF ROCK EGGS Here they are. Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

Barred Plymouth Rocks Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots. P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ-ING, KAN. Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock lamb range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers. MRS. IDA STANDIFERD, "Up-To-Date" Farm.

PRIZE-WINNING S. C. BROWN LEGHORNS Exclusively. (Short's strain). Farm stock eggs from pen scoring 96, \$2 per 15; \$1 per 15 as they run. Incubator eggs a speciality.

MRS. W. O. MAGAGDEN, BEATTIE, KANS. Mention KANSAS FARMER when writing.

BUFF LANGSHANS \$4.00 per 13 eggs.

White \$2. Black \$2. \$1 and \$5 per 100; Buff Leghorns, Orpingtons, Cochins, S. & D. C. B. and White Leghorns, B. and W. Rocks, W. and S. L. Wyandottes, L. Brahmas, \$1.50 to \$2.00 per 15. Toulouse Geese eggs 20c each. M. B. turkeys, \$1.50 and \$2 per 9.

\$8 per 100. Imported and native high-scoring blood in our yards. Mention Kansas Farmer when writing. America's Central Poultry Plant. J. A. Lovette Mullinville, Kans.

When writing our advertisers please mention this paper.

POULTRY BREEDERS' DIRECTORY.

POULTRY BREEDERS' DIRECTORY.

FOR SALE— Choice Light Brahman eggs, \$1 for 16; \$1.75 for 30. Wm. Plummer, Barclay, Kans.

EGGS FOR SALE— Bull Rocks exclusively. Farm range, 50 cents for 16, \$3 per 100. Mrs. W. Lovelace, Muncie, Kans.

ROS E COMB BROWN LEGHORN EGGS, 16 for \$1, 50 for \$2.50, 100 for \$4. Mrs. John Holzhey, Ben-de-dew.

EGGS FOR HATCHING— From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 16 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED ROCKS and Silver Penciled Wyandottes. Having hatched all the chicks I wish, will sell eggs from my high scoring pens at \$1.25 per 16; utility eggs at 5 cents each. Mrs. Chas. Ostorn, Eureka, Kans.

Pure Single Comb Brown Leghorn Eggs— 30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

Cornish Indian Game Eggs. Write L. C. Hurst, Newton, Kansas.

Johnnie Chase, Glasco, Kas.

Breeds Black Minorcas, S. C. Brown Leghorns and Barred Rocks. Second to none in the state. Eggs, \$2 per sitting.

KILLED BY RATS Thousands of LITTLE CHICKS

Why do you allow it? You can stop it if you use my method. Every poultry keeper should know it. Rat-proof walls, poison, etc., are unnecessary. Mail one time for complete descriptive instructions.

J. A. Thompson, 633 Garfield, Topeka, Kan.

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co. Wichita, Kansas

**Our Money-Back Guarantee**

Every incubator we sell absolutely money-back guarantee to do all we claim. The 1906 Reliable is the only incubator with double heating system. Free catalog tells all about it. Pure-bred Poultry and Eggs for hatching. Ask for prices. Reliable Incubator & Brooder Co., Box B-62 Quincy, Ill., U.S.A.

Hatch - All Incubators

They save worry. Help you make more money. Strong, durable. Even heat, pure air, simple to run. Beginners get big hatches. Write us for proofs and learn to add to your income. Handsome catalog free. HEBRON INCUBATOR CO., Box 18, Hebron, Neb.

**KILL the LICE**

Why let lice eat up your poultry profits? Kill the lice with the

LIGHTNING Lice Killing Machine

Guaranteed to do the work better, quicker, more easily and more thoroughly than any other method. Sold on a positive guarantee—your money back, if you are not perfectly satisfied.

Get one at once and double your egg profits.

Write today for free booklet.

Des Moines Incubator Co., Dept. 623, Des Moines, Iowa.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and have you freight. Send for our catalogue with discount sheet for early orders.

Topeka Supply House

7th and Quincey, Topeka, Kansas.

SCOTCH COLLIES.

SCOTCH COLLIE PUPS for sale, \$4 and \$5 each. Pedigrees furnished. G. B. Gresham, Box 102, Bucklin, Kans.

FREE UNTIL CURED

Blood Poison, Catarrh, Deafness, Asthma, Stricture, Sexual Weakness, and Consumption.

No Deposit or C. O. D. scheme, I trust to your honor to pay when cured

M. G. SLOCUM, M. D.

208 East Douglas Ave., Wichita, Kansas

PATIENTS.

J. A. ROSEN, PATENT ATTORNEY

418 Kansas Avenue, Topeka, Kansas

heavy. Wood ashes and coal ashes lighten it up. The best place for the dust bath is in the open air of the scratching shed. Here the dust quickly settles and the hens that are not compelled to breathe it.

Every year the earth that forms the floor of the poultry houses should be removed to the depth of three or four inches and fresh earth put in its place. This is very necessary to the health of the fowls as the soil, after forming the floor of a house for a year, becomes filthy from droppings and germs that promote disease. A neglected house is a sure breeder of cholera and other ailments to which poultry are heir. When the fresh soil is put in, it is well also to make a thin whitewash, add a gill of crude carbolic acid to every gallon of the wash, then apply with a spray pump, forcing the mixture into all the crevices of the building, roof and sides. This is an excellent purifier and germicide as well as destroyer of lice and mites upon whose presence in the house it is usually safe to rely on. Then litter should be placed on top of the fresh earth floor. This litter serves to carpet the floor, keeping the birds' feet warm as well as serving as a medium in which to mix the small grains to encourage the fowls to scratch and thereby obtain the exercise they so much need. Four inches of litter is plenty, as too much rather discourages the efforts of the fowls and they do not take as much exercise as if a smaller amount of litter was used. The yards outside of the houses should be plowed up early in the season so as to purify the ground and give the hens a chance to dig up worms and scratch around generally. The yards should be plowed up several times during the year.

Poultry Notes.

Fowls that have the run of the farm do not need much grain, especially during the growing season. The bugs and other different insects that they pick up readily take the place of it.

When the hens stop laying, in many cases it will be found a good plan to try to start them up again by changing the feed. Reduce the grain to a minimum and give them meat and skim-milk in liberal quantities.

Early-hatched fowls can only be made profitable when they have the best of care. If allowed to run about out of doors on cold, wet mornings or if exposed to severe storms, considerable loss may be expected.

When chickens are scattered about the brooder they are all right; when huddled together they are cold; when they stick their heads out from under the curtains they are too hot. They will grow and thrive if kept in a warm even temperature.

In feeding poultry for market, apply the same principles that you do with other stock. When you begin to fatten them do it just as rapidly and systematically as possible, otherwise no profit will be realized. Ordinarily, two weeks of good feeding should fatten a fowl.

Chickens, when confined in coops or limited runs so they get no food except what is furnished them, should be supplied with scraps from the table, bone-meal, and vegetables with their daily feed of grain. Feed a good variety, feed liberally, but never feed more than is eaten up clean at any one time.

The best way of feeding corn-meal to poultry is to pour boiling water over it, which practically cooks it. A common error is to make the feed too wet and soft in which state it is more or less injurious to the fowls, compelling them to take more water than their nature requires. One of the poorest feeds for poultry of any kind is corn-meal mixed with cold water. Even cold milk is a decided improvement.

Until the poultry are past all danger of drowning, it is well to restrict their range to a lot near the house so as to be able to recoup them at any time should showers threaten, and no matter how balmy and clear the evening, always see them safely sheltered at night. A good day run is absolutely necessary for the health of the turkeys, either young or old, and it is useless to attempt to keep them on damp, cold, or marshy ground. N. J. SHEPHERD, Eldon, Mo.

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railroad. This engraving is 26 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheldley Bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.



The "QUEEN" is not an incubator but the Incubator

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO. BOX 56, LINCOLN, NEBRASKA



Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE ATLAS PORTLAND CEMENT CO. 30 Broad Street :: New York, N. Y.

Profitable Stock Feeding

....by....

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY. NEBRASKA UNIVERSITY.

How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to The Kansas Farmer for only \$2. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

Booklet on The Southwest Limited

Before planning your next trip East it would be worth your while to look through the booklet describing The Southwest Limited, the Train of Trains from Kansas City to Chicago, via the

Chicago, Milwaukee & St. Paul Railway

It will be sent free to those interested. A postal to the undersigned will bring it by return mail.

The Southwest Limited leaves Union Station, Kansas City, 5.55 p.m.; Grand Ave., 6.07 p.m. Arrives Union Station, Chicago, 8.20 a. m.

The Southwest Limited took first place in its first year—and holds it.

G. L. COBB

Southwestern Passenger Agent

Tickets, 907 Main Street

KANSAS CITY

FOR SALE THE UNCLE SAM OIL-GAS BURNER

Asphalt Residuum for good roads and streets; crude oil for fuel, lubricating, or painting; gas, fuel-oil and water white kerosene of high-grade. All anti-trust independent products by barrel or carload.

W. F. RIGHTMIRE, - 216 The Drive, - Topeka, Kansas

THE KANSAS FARMER

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run on the paper, \$1.82 per inch per week.
Special reading notices, 30 cents per line.
Special rates for breeders of pure-bred stock.
Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.
Electros must have metal base.

Objectioable advertisements or orders from unobjectionable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., - Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE CHEAP—One good red registered Shorthorn bull. Kind and gentle. Address J. E. Williams, Fairmount, Kans.

REGISTERED HOLSTEINS and Jerseys of best milk and butter families. Youngsters at reasonable prices. Burton & Burton, Topeka, Kans.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbottsburn 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

HOLSTEIN—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

FOR SALE Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

able supply in sight for the next several weeks. Run to day 5,000, market 10c higher. Clipped stock will preponderate from now on, clipped lambs selling at \$5.25@\$5.50, clipped weathers \$4.75@\$5.25, woolled lambs \$6.15@\$6.60, ewes \$5.50@\$7.50, a few yearlings \$6.60@\$6.25. Woolled feeding lambs, 66 pounds, sold at \$5.90 last week, spring lambs \$9 @11. J. A. RICKART.

South St. Joseph Live Stock Market.
South St. Joseph, Mo., April 16, 1906.

The cattle market was irregular last week, but beef steers closed without much net change, cows and heifers 10@15c lower, stockers and feeders a shade higher. To-day the run is 9,000 head, market steady to strong. The beef steers last week began to show signs of the wind up of the winter feeding, more tail ends than usual, and less toppy lots. A few drovers sold at \$5.60@\$5.85, but the number above \$5.25 was much smaller than in recent weeks. Top to-day is \$5.35 in the native division, although some fancy quarantines sold at \$5.50. There was nothing to speak of here last week from Colorado or the West, as there has every week for a month or more before. One fancy lot of 907-pound native feeders, raised in Northeastern Kansas, sold at \$5.15, highest price for feeders this winter, and one lot of fancy-bred stockers from New Mexico sold at \$5.45c per pound.

Cattle receipts so far in April continue the rate of increase over a year ago that has been maintained ever since January 1, nearly 30 per cent. Not as many cattle are going to the country, but packers are absorbing the surplus, which makes their operations on a scale of 40 per cent heavier than at this time last year. Of course, at this time last year there was a scarcity of beef steers, and the price was rapidly advancing, standing about \$1 higher than at present, top prices last week ranging on the various days from \$5.30@\$5.85, against \$6.15@\$6.75 same week last April. Bulk of steers sell at \$4.65@\$5.25, good heifers \$3.75@\$4.75, cows \$3.25@\$4.50, canners and stock cows \$2.25@\$3.25, bulls \$3.15@\$4.25, veals lower, \$5.60@5.50, feeders \$4@\$4.75, stockers \$3.75@\$4.60, exceptions on both sides of these figures.

Hogs steadily advanced last week, and predictions favor still further gains this week. The top to-day was \$6.60, market steady, bulk of sales \$6.40@\$6.50. Farmwork is occupying all of the time of feeders now, and although the high prices lead some farmers to make sacrifices to market everything available, receipts will probably continue moderate. Packers are not able to get more than 50 per cent as many hogs as they want. Weights below 200 pounds held up strong as compared with butcher weights, which command the top, while heavies have sunk back a notch.

Higher prices for mutton seems to be inevitable, account of the small avail-

CATTLE.

FOR SALE—One roan and two red yearling registered Shorthorn Bites bulls. Splendid individuals. C. G. Cochran & Sons, Pleasantville, Kansas.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kans.

PURE SCOTCH BULLS—A Butterfly, u Lovey and my herd bull. Cows and heifers. Prices right. Goo. W. Wright, Windom, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGREED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruckshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls, Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Fluental Count" (imported); granddams held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

HORSES AND MULES.

FOR SALE—A good black heavy-boned jack. Price, \$250 if sold soon. Do not write but come and see him. I also have others for sale cheap. Address Joseph Pizlinger, Box 14, Olmitz, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 6 draft stallions, 20 coach stallions and 40 jacks at one-half the regular price. Write for bargains.

FOR SALE OR TRADE—I have a large, black, 7-year-old jack that is a good foal-getter, which I will trade for a bunch of cattle or sell for money. Address H. J. Stevens, Wellington, Kans.

FOR SALE CHEAP—Fine young trotting-bred stallion, by Flood Wilkes. J. E. Breckbill, Detroit, Kans.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 14 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swayedback. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Euclid, Kansas.

SEEDS AND PLANTS.

NICE RE-CLEANED ALFALFA SEED FOR SALE. Guaranteed pure; \$8 per bushel. H. L. Heaton, Oberlin, Kans.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

AGENTS WANTED.

WANTED—A hustling agent to every community for the best paying preparation ever offered. Ginsu Chemical Company, Wichita, Kans.

HELP WANTED.

SUGAR BEETS IN THE ARKANSAS VALLEY—Laborers for thinning and cultivation needed very shortly. 15,000 acres of beets are grown for the American Beet Sugar Company by farmers near Lamar, Prowers, Las Animas, Rocky Ford, Manzanola and Fowler. Hundreds of men and boys needed for work in the beet fields. Farmers will pay 15 cents per hour for day labor, but contracts by acre preferred and more remunerative to the laborers. Laborers board themselves. Work will commence the latter part of May. For further information write the American Beet Sugar Company at Lamar, Colorado. Single hands or families coming to the valley about the 20th of May will also find profitable work. American Beet Sugar Company, Rocky Ford, Colorado. American Beet Sugar Company, Lamar, Colo.

WANTED AT ONCE—A man to work on the farm by month. Good wages to the right man. F. M. Gordon, Eudora, Kans.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

REAL ESTATE.

FOR SALE—Choice fruit ranch, 20 acres near Santa Fe, New Mexico; apple orchard, full bearing. Splendid house, complete in every particular. Finest climate in the world; high price for fruit. Small first payment taken. Write to-day to owner W. H. Wise, Santa Fe, New Mexico.

I WILL TO DISPOSE OF my farm, "Prospect Hill," opposite Leonardtown, contains 240 acres of which 80 is in timber, first class dwelling, 7 rooms and cellar, 2 tenant houses, 3 large barns with 5 ton scenes, well and pump in driveway and cellar, 200 foot tool shed, greenhouse, etc. Farm is one of the best in county, soil water with oyster shell; no malaria or mosquitoes. \$7,500, full cash, balance 4 years. Building cost \$6,000. G. F. Pabst, Leonardtown, St. Marys County, Md.

320 ACRES, 6 miles from Emporia; 6 room house, barn 30 by 36, cattleshed 20 by 40; good orchard and other fruit, 70 acres cultivated; 300 acres can be plowed or mowed; watered by wells and creeks; one mile to school. Price \$28 per acre. Can give immediate possession. Hurley & Jennings, Emporia, Kans.

FOR SALE—Coal land, farms and timber. The place for a poor man to get a home. Campfield, box 155, Fort Smith, Ark. Real estate man need not apply.

EXCHANGE—All kinds of properties for trade or exchange. Also large lists of farms for sale. If any thing of this kind interests you write us at Minneapolis, Florence or Sullivan, Kansas. Harrison & Studebaker

MISCELLANEOUS.

DISCRIBE YOUR WANTS—We submit them to our customers free. Mutual Benefit, Omega, Okla.

DOGS AND BIRDS—For sale dogs, dogs, pigeons, ferrets, Belgian-hares, all kinds; sc 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

FOR SALE OR TRADE—The best liver stable in Topeka, from 21 to 27 boarders, will in voice over \$2,000. \$1,800 cash taken it or will trade for country stock. Ill health reason for selling. Address W. R. Falkner & Co., 109 West 7th St., Topeka, Kans.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kansas.

GOOD POSITIONS as salesmen now open in every state. Experience unnecessary if a bluster. Steady work, good pay and promotion. Apply at once to Morotock Tobacco Works, Box D 51, Danville, Va.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamp or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3 1/2x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

ENSILAGE CUTTER—For sale a nearly new small cutter, self feed, 10 ton capacity per hour. Will sell at a bargain. Address E. W. Adams Berryton, Kans. Topeka Independent phone 8502

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 to as high as \$155.50 per month. Wanted—400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We want all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 48, 34 Monroe St., Chicago Ill.

LEGAL.

Publication Notice.

In the District Court of Shawnee County, Kansas. A. M. Cowles, Plaintiff, vs. Flora S. Wright, et al., Defendants.

The State of Kansas to Flora S. Wright, E. Payton Wright, and W. W. King,

Greeting: You are each hereby notified that A. M. Cowles on Mar. 31, 1906, filed her petition in the court above named against yourselves, as defendants, and that you must answer said petition by the 17th day of May, 1906, or the same will be taken as true, and judgment will be rendered in said action barring each of you from any interest in, and quieting the title of the plaintiff to, the real estate described in her petition, towit:

Lots 4, 5, and 6 on McVicar Avenue in Ensignger's Subdivision of Lots 2 and 5, of Block 8 in College Hill Addition to the City of Topeka, in Shawnee County, Kansas, according to the recorded plats of said Addition and Subdivision.

A. M. COWLES.

Stray List

Week Ending March 29.

Elk County—J. L. Logsdon, Clerk.

STEER—Taken up by John Chamberlin, in Palmerhood tp. (P. O. Longton), Nov. 10, 1905, one red steer, 2 years old, slit and crop off under part left ear; valued at \$23.



Cheap Rates to California and Mexico

From April 25 to May 5, inclusive, round trip tickets will be on sale to Los Angeles, San Francisco and Mexico City at exceptionally low rates:

From—	To	
	San Francisco	
	Los Angeles	
	Mexico City	

Through Pullman sleepers daily from St. Louis and Kansas City to the City of Mexico.

Through tourist sleepers from St. Louis to San Francisco on Tuesday of each week. You step into the cars at St. Louis and do not leave them until you reach Mexico City or San Francisco.

If you're thinking of going to either California or Mexico write for copies of "California" and "Mexico." They're free, address

W. S. SP. GEORGE
General Passenger Agent
580 Wauwright Building, St. Louis, Mo.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Money to Loan On Real Estate

Semi-annual, or annual interest, five, seven, or ten years time, with privilege of payments at any interest period.

. . . . No Delay in Furnishing Money

Merriam Mortgage Company
Columbian Bldg., Topeka, Kansas

\$8,000 Net Income Every Year On A QUARTER SECTION

Of Irrigated Land In the Arkansas Valley of Colorado and Kansas

You can till as large an acreage under irrigation as without. The idea that an irrigated farm has to be only a small garden patch, is an exploded theory. You can make a good living on a small irrigated farm and you can not on the other kind, but you can also manage a large irrigated farm with marvelous ease and profit. Send for detailed information to

P. C. Reilly, 824 Kansas Avenue, Topeka, Kansas

320 ACRES level wheat land, five miles of Plains, Meade County, Kans; 220 cultivated, 180 wheat, 35 barley, house, barn, granary, tool shed, well, windmill, orchard, corrals, Price \$4000. Half cash, balance 7 per cent, your time, 480 acres fenced, 180 wheat land, 25 barley, spring, tank, cross-fenced, price \$2500. Half cash, balance 7 per cent, your time. These four quarters join and will be sold together, or separately. E. H. Boyer, Meade, Kans.

FOR SALE.—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

440-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Balnum, Arlington, Kans.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realty Co., Clay Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Balnum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE
in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

180 ACRES—ALL BROKEN—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—ALL FENCED—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Plainville, Kansas.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 156 Wabash Ave., Chicago.

FOR SALE—Farms—Bargains; 500 farms, stock ranches. Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Ks.

FOR SALE—640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

A CORN AND ALFALFA FARM.
FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address M. E. Beall, Woodruff, Kans.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

WHEAT FARMS ON EASY TERMS IN Sherman County, Kansas

At from \$5 to \$15 per acre. One crop will pay for the farm. Healthful climate, splendid schools, railways close at hand, good neighbors. Soil is black loam, good depth, no sand, very productive. 1905 Wheat crop averaged 25 bushels to the acre. Write me at once, as these farms will not last long at the present prices.

Albert E. King, McPherson, Kansas

Stand Up for Osborne County

In the great Solomon River Valley, the richest section of the Northwest. The best all-purpose county in the State. The home of Alfalfa, the king of all grasses, where land values are always increasing, where prices now are very low. The most productive soil the sun ever shone upon, ideal climate, abundance of pure water and timber. Prices \$10, \$15, \$20, \$25 and \$35 per acre. These prices will double inside of two years. Write me for full particulars and list of farms.

A. L. BROWN, (the man who sells Osborne County lands),

Osborne, Kans.

We do not deal in extreme Western lands, hot air, hot winds, sand, sage brush and blue sky, but handle Osborne County lands, exclusively. That's what makes our business grow.

Mention Kansas Farmer when you write.

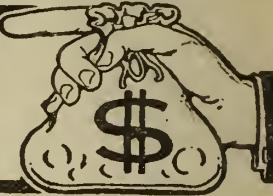
WE GIVE YOU TEN YEARS TIME

in which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices.

Write for full information, FREE.
THE UNION PACIFIC LAND CO.,
Department F.,
Omaha, Nebraska.



Getting What You Want

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and richest sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do.

Send for our booklet. Write for particulars. It will pay you. Address LOS MOLINOS LAND CO., LOS MOLINOS, TEHAMA CO., CALIFORNIA.

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, - - Kansas

Sheridan County Land

A choice section six miles from Hoxie, \$12.50 per acre. 320 acres, \$2,500. A well improved 800 acre tract, three miles from town, perfect land, \$15 per acre. Thousands of acres of northwestern Kansas land for sale at \$8 to \$15 per acre. Write for statistics showing the products of the County in the past years and our price list.

Sheridan County Land Co.,
Hoxie, Kansas

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. THE DOWNS REALTY CO.,
Downs, Kansas.

Hurley & Jennings' Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS,
Emporia, Kansas.

GEO. M. NOBLE & CO.

Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice,
Topeka, Kans.

MCKENZIE LAND AND IMMIGRATION AGENCY

Wants an agent to represent them in every county in Eastern Kansas and Eastern Nebraska to solicit buyers for Thomas and Rawlins County Lands. We own and control large tracts of the choicest land and prefer to deal through agents. It is not necessary for a man to be engaged in Real Estate business to act as an agent. A successful farm makes the best agent. Write us for full particulars and advertising matter. McKinzie Land and Immigration Agency, Colby Kans.

Holton Real Estate and Loan Co.

Holton, Kansas,
Make a specialty of Texas ranch and farm lands. Western Kansas lands in any quantity. Send for descriptive lists.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
St. Louis.

Watch Tacoma Grow!

Population, 1900, 37,714

Population, 1906, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamps for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4c for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

Crimson Wonder 38755 Herd

Will have something fine to offer. Can furnish tritos not akin sired by Crimson Wonder 38755 and Kerr's Champion 23855.

Mr. & Mrs. Henry Shrader, Wameca, Kans.

Fairview Herds, Duroc and Red Polled

A few spring boars and Red Polled Bull Calves for sale.
J. B. DAVIS, Fairview, Brown Co., Kans.

Egypt Valley Duros

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

Square Deal Stock Farm

Wm. A. Calder, Prop., Bancroft, Kans.

We have for sale at \$20 each, two Poland-China boars, sired by Calder's Chief by Garver's Choice, by Kansas Chief; dam Lady U. S. by U. S. Jones.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER, Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

Highland Herd of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

STEELE'S DUROCS

I have eight boars of December farrow, weighing 75 to 80 pounds, that are by Paul Wonder 3235, he by Com Paul II 17679. This is a good herd boar material, and the price is right. I shall have for future delivery boars by Steele's Model 10764 by Chief Orion 28817, and a few by Paul Wonder. Please write me your wants.

C. G. STEELE, Barnes, Kansas

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 68203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and just fall pigs, sired by the great show hog, Empire Chief 20376, out of number one sow. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS
Route 5, Leavenworth, Kans.

Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27964, for sale. Some sows here. Visitors welcome. Mention Kansas Farmer and write for prices.

Axline's
Poland-Chinas and Barred Plymouth Rocks
Eggs \$1 per sitting. Choice fall pigs, either sex.

E. E. AXLINE Oak Grove Missouri

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. It. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Friesian Cattle; either sex. Best strains represented. H. N. HOLDEMAN, R. R. No. Girard, Kans.

Decatur County Herd of POLAND-CHINA SWINE

12 full boars for sale out of Chief Tecumseh 2d and Corrector sows, and sired by King Perfection by Royal Perfection. I will sell them right.

R. H. WEIR, Route 3, Oberlin, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding, for sale, to either Address

G. M. Hebbard, Route 2, Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREAED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32604, Perfection Now 32550, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of finish. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kan.

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINA BRED SOWS

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

Chester-Whites

O. I. C. SWINE
Choice young stock of both sexes for sale at very low prices.
S. W. ARTE, Larned, Kans.

World's Fair CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 12 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peoullar, Mo.

O. I. C. Hogs
Scotch Collie Dogs
B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Brandane Noble. We are siring more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make It Run." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Boars closely related to our Worlds Fair Winners ready for buyers.

Headquarters for up-to-date Chester-Whites

O. L. KERR, Independence, Mo.

Berkshires

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous Bl. Tobinhood, Berryton Duke and L. Premier strains. A. D. Willems, Inman, Kans.

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jourist topper 76277.

Wm. McAdam, Netawaka, Kans.

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Compton 89195.

W. J. Grist, - Osawkie, Kans

Ridgeview Berkshires

SOLD OUT except one yearling boar. Get in your order for pigs of spring farrow. One herd boar for sale.

MANWARING BROS., Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds.

40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 6th 33446, Lord Lee 6138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus

Aberdeen-Angus Cattle

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kans.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, ROUTE 1, POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Poll'd Cattle

Young stock for sale.

WILKIE BLAIR, - Girard, Kans.

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of

Percheron Horses, and Plymouth Rock Chickens

Address, S. C. HARTLETT, Route 5, - - - - - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blooky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

Herefords

Registered Herefords

Individual merit and choicest breeding. Dale Dipper 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56601 and Lord Albert 131557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235,

and Printer 86634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

Shorthorns

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by

L. A. MEAD, Kingsdown, Ford County, Kansas

For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM

Shorthorns

M. C. VANSELL Muscotah, Kansas
Breeder of Scotch and Scotch Topped Shorthorns, choice Poland-Chilas and Barred Plymouth Rock Chickens. For sale a pure Scotch bull. Order eggs now at 75 cents per dozen.

**Ashcraft
Shorthorn Herd**

The Scotch Victoria bull Scottish Minstrel 234970 at head of herd.

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldilocks, full sister to the champion Lavender Viscount in service. Cruckshank and Cruckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8.
Topeka, Kansas.

New York Valley Herds**of Shorthorns and Berkshires**

Baron Ruperl 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72863 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. - Yates Center, Kans.

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Horses and Mules**Do You Want to Buy a Jack?**

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

REGISTERED BLACK MAMMOTH and CATALONIAN JACKS, SADDLE and TROTTING HORSES
The best in the state and at a low price. Come, or write for prices on what you want.
G. A. FEWEL
LEETON, JOHNSON Co., Mo.

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 18 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to registry, weight about 1,700 pounds 4 and 10 years of age.

One Black Percheron Stallion

Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.

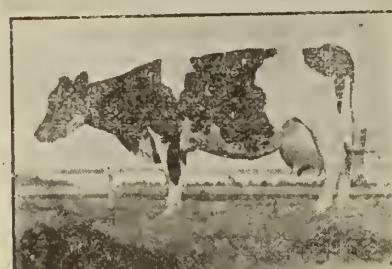
T. H. TERRY, Bavaria, Kansas

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the KANSAS FARMER one year, both for only \$2.50. Address,
THE KANSAS FARMER CO.,
Topeka, Kans.

FIFTH TERM
JONES' NATIONAL SCHOOL
of
Auctioneering and Oratory
Davenport, Iowa

6th Term opens July 23, 1906. All branches of the work taught. Students now selling in 18 states. For Catalogues write Carey M. Jones, President

Holsteins

C. F. STONE, Peabody, Kansas,
Breeder of
PRIIZE-WINNING HOLSTEINS
Young Bulls and a few young Cows
and Heifers for sale.

Auctioneers**Col. T. E. Gordon**
Live-Stock Auctioneer

Waterville, - Kansas

Reference: Those for whom I have sold.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phoue 22.

L. R. Brady
Auctioneer
Manhattan, Kansas
Fine stock sales a specialty
All Herd Books. Catalogues compiled. Sale tent free.

Z. S. BRANSON
Live Stock Auctioneer
Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values
Terms reasonable. Inquiries cheerfully answered.

John Daum Nortonville, Kansas
Live Stock Auctioneer
Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

R. L. HARRIMAN
AUCTIONEER
Bunceton, Mo.

**First
Class
Service.
Best
Results.
Terms
Low.**

JAS. W. SPARKS
Live Stock Auctioneer
MARSHALL, - MISSOURI

Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

Horses and Mules**FRANK IAMS**

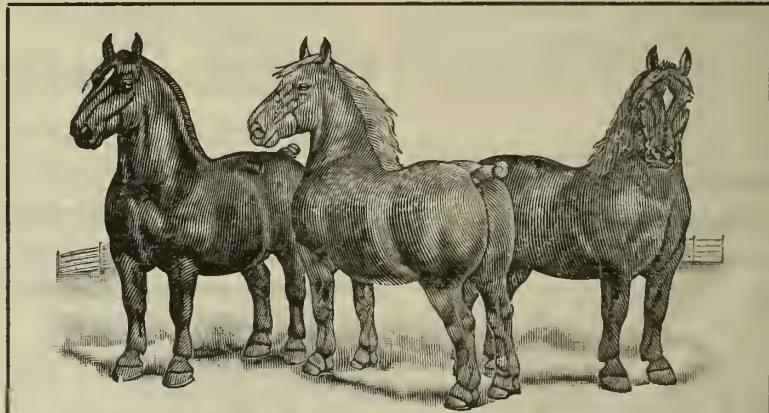
and his "Big 4" three year old Percheron stallions, weight 8340 pounds. Winners of 1st, 2d, 3d and 4th prizes at Iowa and Nebraska State fair (over all). They are "sensational show stallions"—"Iams' sort," Iams sells models like these "Peaches and Cream" stallions at \$1000 and \$1500. It's up to you, Farmer John! Will you be "humbugged" by "bunco salesmen?" Iams owns and sells more 1st-class stallions than any man in the United States. He has his "scam" gets away from Iams. "Iams' daily "Horse show" and his "Town of horse barns" filled to the roof with wide-as-a-wagon "black boys."

50—STALLIONS—50

2 to 6 years old, weight 1700 to 2600 pounds, 90 per cent blacks, 50 per cent ton stallions." All registered, approved and stamped by European Government. Dad, it's "100 to 1" that Iams is pushing his competitors off the roof and hypnotizing his buyers with "top notchers" at 50 cents on the dollar, "let live prices." Iams' "horse show" at Iowa and Nebraska State Fair was the "talk of the town." The "best ever." All winners and sons of winners. His 2, 3 and 4 year old Percherons, Belgians and coach stallions won every 1st, 2d, sweepstakes and grand sweepstakes prize at Nebraska State Fair. At Iowa State Fair they were winners of 90 per cent of same prizes in above classes, and the Iowa and Nebraska people said Iams is a "hot advertiser" but "he has the goods" better than he advertises. Teddy, it's "10 to 1" that Iams' "Peaches and Cream" stallions are "hot stuff" (for competitors). "It's a cinch" that Iams saves his customers thousands of dollars in commissions and middlemen's profits. Iams places \$1000 insurance for \$60.

\$1000—SAVED AT IAMS'—\$1000

Ikey! What a rich graft these "slick stallion salesmen" are working on the honest farmer selling 4th rate stallion at \$2000 to \$5000. Iams sells "top notchers," so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallions yourself. Take no "gold brick stallion salesman's" word. Iams has "the goods" you read about. His establishment is worth going 2000 miles to see. Iams makes his competitors "holler." He is knocking "high prices" out of the X'ms tree. Iams saws wood, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear! Buy a stallion of Iams. His \$120 stallions are much better than our neighbors paid those Ohio men \$4000 or. Then I can wear the diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has no two to ten men to divide profits with. Iams guarantees to sell a better stallion at \$1000 to \$1500 than are sold to Stock Companies for \$2500 to \$5000 by slick salesmen, or pay you \$100 for your trouble, you the judge. Iams pays horses' freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth. References: St. Paul State Bank, Citizen's National Bank, St. Paul, Nebraska.

The Lincoln Importing Horse Com'y
Lincoln, Nebraska

We still have a grand lot of PERCHERON, BELGIAN, ENGLISH SHIRE and GERMAN COACH stallions on hand, and for the next FORTY DAYS will make a 15 PER CENT DISCOUNT. Come quick. Remember these stallions must and will be sold within forty days. Write at once for catalogue or take the first train that will land you in Lincoln, where you take the state farm street car, which brings you direct to our barn doors.

A. L. Sullivan, Mgr.

REGISTERED PERCHERONS.

Coachers, Saddlers, Big Mammoth Jacks and Jennets. Yalti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS,

Westphalia, Kansas.

CHEYENNE VALLEY STOCK FARM PERCHERONS
Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

200 HEAD

Imported German Coach, Percheron
and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.

ELDORADO STOCK FARM

A choice lot of imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

GIFFORD'S SHORTHORNS

22D ANNUAL SALE FROM ELMWOOD FARM
WILL BE HELD AT

Manhattan, Kans., on April 25, 1906, in the Sale Pavilion

20 extra good red Scotch-topped bulls from 12 to 20 months old, all in fine condition, sired by Red Gauntlet 3d 147509, a Cruickshank bull of exceptional quality. Twenty of the best young cows and heifers ever offered from the herd, all bred to Scotch bulls Senator Bruce 226244 and Cordelia's Knight 161501 (the best son of Red Knight). Cordelia's Knight will be included in the sale, is sound and all right, and a great breeder. This will be the place to get a choice bull or a few good cows to start with. Come to the sale and bring your friends. For a catalogue address

COL. GEO. P. BELLOWS,
COL. L. R. BRADY,
COL. JOHN BRENNAN, } Auctioneers.

F. M. GIFFORD,
WAKEFIELD, KANSAS.

GEO. ALLEN'S STRAIGHT CRUICKSHANK SHORTHORN SALE

At Sale Pavilion, South Omaha, Nebraska, Tuesday, May 1, 1906

I will consign at public auction four head of pure Cruickshank and Scotch Shorthorns of my own breeding, of which twenty-seven are cows and heifers from one to four years old, and fourteen bulls from twelve months to three years old, representing such choice Cruickshank families as Victorias, Lavenders, Secrets, Barmptons, Butterflies Acanthus, Village Princesses, Matchlesses of Mill Valley, Misses and Nonpareils and one pure GRAND DUCHESS cow without an outcross. Note the breeding of a few of those in the sale:

No. 1 LADY MISSIE 3d. Cow.

Roan, bred by George Allen, Lexington, Neb., calved March 9, 1906.
Got by Godwin 115676..... W. A. Harris
Imp. Collynie Missie..... Nonpareil Victor 132573..... J. D. Willis
Dalmeny Missie 4th..... Sittyton Seal 149570..... Wm. Duthie
Missie 132d..... Lord Lavender 145437..... A. Cruickshank
Missie 104th..... William of Orange (50694)..... A. Cruickshank
Missie 91st..... Athabasea (47359)..... A. Cruickshank
Missie 49th..... Heir of Englishman (24122)..... G. R. Barclay
Missie 20th..... Gold Digger (24044)..... W. Marr

No. 6. NONPAREIL LADY. Cow.

Red, bred by W. D. Flatt, Ontario, Canada. Owner by Geo. Allen, Lexington, Neb., calved Feb. 14, 1902.
Got by Royal Clarence 220343..... J. Thompson
Nonpareil 56th..... Stanley Lad 169003..... S. J. Pearson
Nonpareil 55th..... Prince Royal 14836..... J. & W. Russell
Nonpareil 45th..... Royal Booth 2d 3818..... Chas. Mayan
Nonpareil 34th..... Imp. High Sheriff 131 (24162)..... S. Campbell
Nonpareil 32d..... Imp. Inkerman 137 (31414)..... S. Campbell
Imp. Nonpareil 31st..... Sir Christopher (22895)..... R. Booth

No. 10. BUTTERFLY DUKE 2d. Bull.

Red, bred by George Allen, Lexington, Neb., calved May 12, 1904.
Got by Godwin 115676..... W. A. Harris
Butterfly of Oakwood..... Prime Minister 94315..... A. Cruickshank
Butterfly 56th..... Lord Lucas 76050..... S. L. Cheney
Butterfly Bloom..... Orange Blossom Perfection 71000.... I. Davidson
Butterfly 52d..... Crown Prince Atlestone 11th 16585... D. Christie
Imp. Butterfly 43d..... Royal Duke of Gloster (29864).... A. Cruickshank
Butterfly 36th..... Caesar Augustus (25704)..... A. Cruickshank
Butterfly 10th..... Grand Monargue (21867)..... A. Cruickshank

No. 11. ENSIGN. Bull.

Red roan, bred by George Allen, Lexington, Neb., calved Sept. 3, 1904.
Got by Godwin 115676..... W. A. Harris
Matchless Lady..... Bapton Ensign 172542..... D. Willis
Matchless 6th of M. V..... Golden Crown 98258..... J. I. Davidson
Matchless 3d of M. V..... Anchorite 90241..... A. Cruickshank
Matchless 2d of M. V..... Confessor 65542..... A. Cruickshank
Matchless of M. V..... Royal Barmpton 94949..... A. Cruickshank
Matchless 18th..... Statesman 15539..... S. Campbell
Imp. Matchless 16th..... Senator (27441)..... A. Cruickshank

In selecting the foundation of my herd I was careful to get the best Cruickshank breeding and individuals to be found, and they cost me from \$500 to \$1000 each. This consignment is made up of choice young animals, many of which I would have preferred to keep, but it being my first sale in the West, I desire to make it an attractive one. All cows and heifers old enough for service will be safe in calf, or have calf at side by the Scotch bulls whose pedigrees will appear in the catalog, which will be sent on application. Breeding lists furnished at time of sale. This will be a good time to get choice show cattle and herd-heads.

COL. GEO. P. BELLOWS } Auctioneers
COL. T. G. CALLAHAN
H. E. HENTH, Clerk, Omaha

GEO. ALLEN, Lexington, Neb.

Shorthorn Dispersion Sale Hope, Kansas, April 26, 1906

50 Head including the great herd bull, The Rustler 186800, sired by the Lad For Me 140618 and out of the dam of the champion Ruberta. The 14 of his get, 9 heifers, 5 bulls, calves and short yearlings, that are in the sale, prove him one of the greatest sires in the West. The balance of the offering are cows and heifers bred to this great bull; a few of them have calves at side.

Send for Catalogue

Cols. Sparks and Brady, Auctioneers

H. R. Little, Hope, Kansas

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

The Kansas Farmer...

The Greatest and Best Advertising Medium for Reaching the Farmers of the Middle West, of

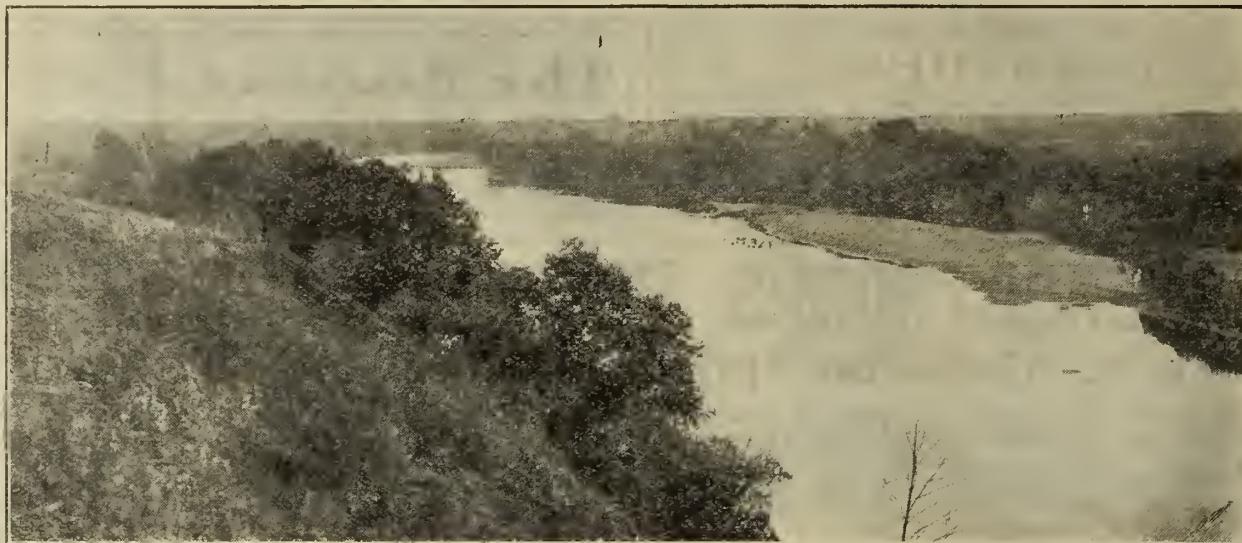
TOPEKA,

KANSAS

Even In CALIFORNIA There is a Choice

Why Not Buy The BEST LAND For Sale

SAN JOAQUIN
RIVER, SHOW-
ING GROWTH
OF TIMBER
AND HIGH
BLUFFS.
GOOD FISHING,
BATHING, AND
BOATING.



WHY NOT
LIVE WHERE
YOU CAN HAVE
SOME
PLEASURE
NEAR AT
HOME?

This is truly a Wonderland, occupying the central part of the great San Joaquin Valley and embracing almost every variety of climate and production of the Northern Continent. There is no land on earth where extensive farming is more profitable than on the Fresno Irrigated Farms. The intensive method of farming brings land to its highest degree of cultivation, produces more comfort in the home for the reason that it makes neighbors very much closer. Thousands of acres of the richest soil in the world lie waiting the coming of the small farmer on the tract of the Fresno Irrigated Farms Co. It is only under intensive farming that these lands will give up their best. When the land is worked to its utmost that best is something never dreamed of by farmers of the older States.

EXPENSES are light on the small diversified farm and one is always certain of having the table necessities. This is not a shiftless man's country for to succeed on a small farm in this State a man must apply himself to the business on hand. Hundreds of successful men in California made their start and achieved success through diversified farming, having bought their land and made part payment in the beginning and then cleared their places in three years from the proceeds. Why can't you do the same?

If you have \$800, \$1,000, \$1,500, or \$2,000 write to us and we will give you information that is interesting. Remember this depends upon the man.

The demand in California for the produce from the diversified farm is increasing. The wonderful amount of tourist travel has created a demand for the luxuries of life faster than our farmers have been able to supply them. Why shouldn't you get the benefit of this condition? Write us at once for our illustrated 64-page booklet, giving full particulars. We will mail it to you free.

A 160-ACRE
FARM,
ONLY 1 YEAR
OLD,
NOW WORTH
\$20,000.00.



Buy land that
you can get re-
turns from on
your investment
the first year.
Why wait 3 or 4
years for coming
trees to come in
to bearing?

Fresno Irrigated Farms Co.,

Main Office—
511 Kohl Bldg.,
San Francisco, Cal.

Fresno, California
Los Angeles, Office
230 Pacific Electric Bldg.,

Sales Office—
1161 I Street,
Fresno, Cal.

630.5
KAF.

KANSAS FARMER

Volume XLIV. Number 17

TOPEKA, KANSAS, APRIL 26, 1906

Established 1863. \$1 a Year

THE CALIFORNIA EARTHQUAKE.

Early on Wednesday morning, April 18, the city of San Francisco and surrounding country were violently shaken by an earthquake. As people rushed into the streets in their night clothes, the earth seemed to heave and roll beneath their feet, massive buildings tottered and fell, and fire broke out in the falling structures. Many were killed, many were injured in various ways, and some are believed to have perished in the flames. While it is known that several hundreds met violent deaths, the exact number has not been ascertained and will probably never be known. The earthquake broke the water-mains so that the firemen were deprived of their usual means of combatting the flames. They resorted to dynamiting whole blocks of buildings in the hope of checking the fire, but, fanned by the fierce winds, the fire leaped at a bound the openings created by the dynamite, and the destruction sped on until about three-fourths of the city had been burned.

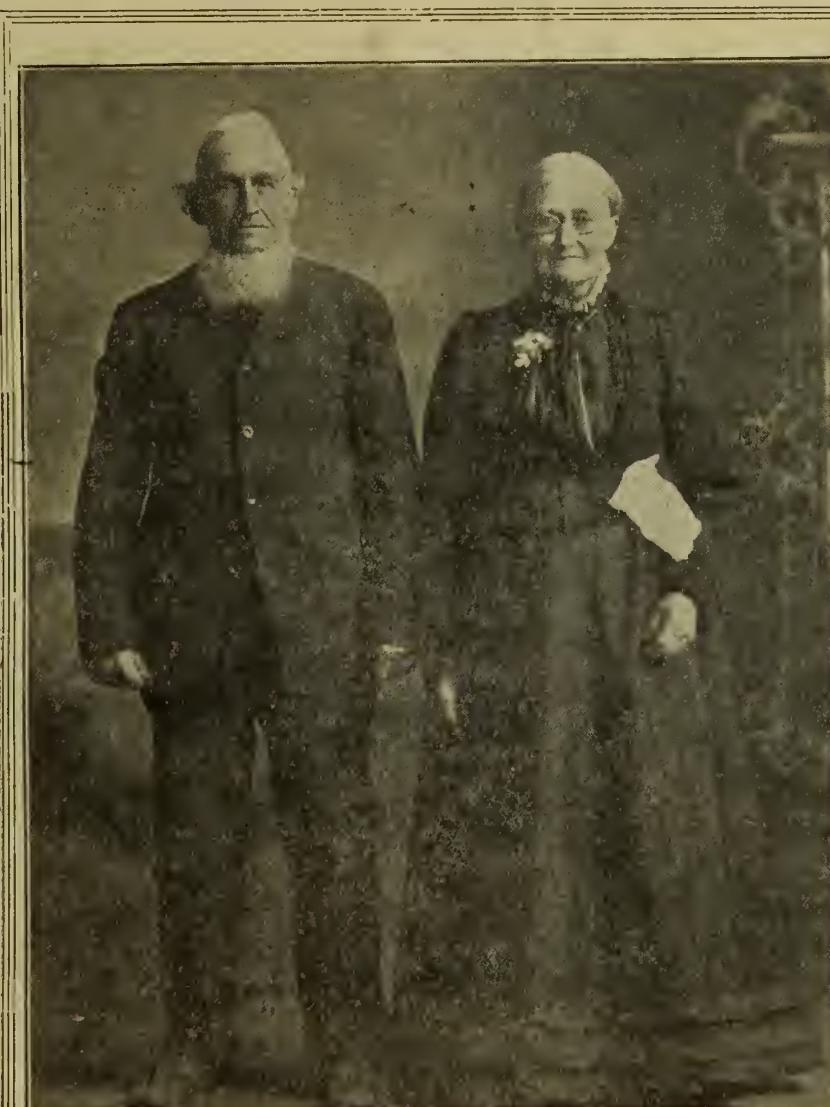
It has been stated that 250,000 people were rendered homeless. Most of them gathered in the parks and in other open spaces. Their privations, their sufferings, and their losses appealed powerfully to the sympathies of their fellow men all over the country, with the result that relief in large measure was despatched to the stricken as rapidly as express trains could carry it. A million dollars was promptly appropriated by Congress, and a million and a half followed on Tuesday of this week. The railroads promptly offered to carry all relief goods free of charge. Without delay, Kansas despatched many carloads of flour, carloads of meat, carloads of potatoes, and in addition, telegraphed thousands of dollars in money. With commendable promptness and energy, Governor Hoch addressed himself to the work of obtaining and forwarding relief. He was placed at the head of the State committee and in cooperation with other willing workers did effective service in promptly sending supplies to starving and shivering unfortunates.

The confusion which resulted from the sudden and prolonged catastrophe called for the exercise of prompt and decisive authority. The Golden Gate City was fortunate in the fact that the military post there was commanded by a man of the judgment and capability of General Fred Funston, who, without waiting for orders or the unrolling of any red tape, promptly issued and caused to be executed orders which rapidly brought chaos to an end, made looting dangerous, systematized relief work and restored sanitary conditions.

The relief work was at first placed in General Funston's hands, and was executed with a soldier's promptness and a philanthropist's tenderness. Later, the relief work was turned over to Dr. Edward Devine, of the National Red-Cross organization.

The California coast has had previous experiences with earthquakes. On October 21, 1868, San Francisco was shaken by an earthquake in which four persons lost their lives. After this, many houses were constructed of redwood logs neatly dressed and usually covered with weatherboards. Tall buildings were tied with iron rods as security against earthquake shocks. In the early days of the city, it was several times destroyed by fire, but after each fire a finer city took the place of the one destroyed.

The San Francisco just now the center of interest contained, a few days ago, about 400,000 people. Its wealth and business were immense. Doubt-



Mr. and Mrs. T. F. Little, Emporia, Kans., Who Have Taken The Kansas Farmer for Forty-One Years.

EDITOR KANSAS FARMER:—We thank you for your kindness in sending us a free KANSAS FARMER the past year because of our age and length of time we have taken THE KANSAS FARMER (since 1865), and we would show our appreciation of your kindness by enclosing one dollar for the Y. M. C. A. building. We are glad to have lived in Kansas while it is being made a great; GREAT, GREAT State, and THE KANSAS FARMER has helped.

Emporia, Kans., April 14, 1906.

MR. AND MRS. T. F. LITTLE.

less a more beautiful city will spring from the ashes and ruins. Doubtless the advances recently made in fire-proof construction will make the new city secure against such losses by fire as have just been experienced. Buildings of Portland cement concrete reinforced plentifully with steel rods are practically proof against fire. In many modern buildings this construction is used not only for walls but for beams, floors, ceilings, and roofs. Metal casings and doors furnish nothing to burn, while glass in which pigeon wire is embedded retains its place even though the heat break it. It remains to be seen whether such construction can be so strengthened by increasing the numbers of steel rods as to make it secure against earthquakes. There is little doubt but that, properly used, such materials may be so made as to be capable of resisting shocks that would throw down buildings as usually constructed of brick or stone and mortar.

While some will probably want to get away from the scenes of the great catastrophe, while some will fear a

repetition of the earthquake, most persons will quickly recover from the shock. It will be realized that it takes nature a long time to get ready for such a convulsion, so that the middle-aged person who now lives at San Francisco is not likely to see another like calamity.

CLEANING DODDER-INFESTED ALFALFA-SEED.

Recent experiments conducted by F. C. Stewart and H. J. Eustace, of the New York Agricultural Experiment Station, show that almost any alfalfa-seed on the market may be made practically free from dodder and safe to sow by careful hand-sifting through a wire sieve having twenty meshes to the inch. A cheap, serviceable sieve for the purpose may be made by constructing a light, wooden frame about 12 inches square by three inches deep and covering the bottom of it with twenty-mesh wire-screen made of No. 32 (English gauge) round wire.

One-fourth to one-half pound of seed should be put in the sieve at a time and vigorously shaken during one-half

minute. A man should be able to clean from five to ten bushels of seed per day.

Dealers in alfalfa-seed should either sift all the seed they sell or else provide their customers with the means of doing the work themselves. Dodder is so troublesome a weed that no one can afford to take the risk of sowing unsifted seed.

POISONING CUT WORMS.

The Oklahoma Experiment Station reports that further experiments in poisoning cut worms, which have been working on wheat and alfalfa, have shown the following mixture to be superior to spraying with Paris green, as formerly recommended:

Thoroughly mix while dry, one pound of Paris green and fifty pounds of wheat bran, make moist, but not sloppy, by adding water in which a quart of cheap molasses has been dissolved. Place this mixture in spoonful piles where the worms are working. It attracts the worms from the wheat and oats. It is also good grasshopper poison.

A VALUABLE HOOK.

One of the most valuable books recently published is Black's Medical Dictionary. It is written so any intelligent person can understand it. More than its name implies, it describes as well as defines. By its use one can be informed of the treatment of the common ailments. The value of the book for general use is best shown by a quotation as follows:

"FAINTING or Syncope, is a temporary loss of consciousness associated with feeble action of the heart.

"CAUSES.—The manner in which the loss of consciousness is produced appears to be that the feeble heart is unable to pump blood up to the brain, thus causing anæmia of that organ, and rendering it unable to act. If the person who threatens to faint lies down, or, still better, if she sits and then bends forward so as to bring the head below the knees, the faint is averted. The feebleness may be due to some long-standing heart disease, which through an overstrain suddenly reaches a climax. Or it may be a part of the general muscular relaxation which takes place in a hot bath, fainting in a bath being sometimes a cause of death in weak persons. Powerful emotion, generally of a sorrowful nature, but sometimes even great joy, is a very common cause. Extreme pain, such as that due to the crushing of a limb, and shocks to the nervous system, such as a blow on the head or on the abdomen, are very apt to cause fainting, or even the more serious condition known as "shock." Disgusting smells and sights, breathing of bad air, and general exhaustion are also causes. As a rule, a combination of these causes is necessary, except in hysterical persons, and persons weak from some illness, who are specially liable to faints. Certain drugs which depress the heart's action, such as tobacco or chloroform, when taken in large amount, produce syncope.

"SYMPTOMS are well known. There are certain warning symptoms, such as pallor, feebleness of the pulse, a sinking feeling, and a dulness of sight and hearing. When the faint has occurred, the person lies still, breathing very faintly, with feeble pulse, pallid complexion, and often perspiration standing in drops on the face.

"The faint, as a rule, lasts only a few seconds or minutes, but it may last for hours, and hysterical persons may pass from one faint, only to fall into another, several times.

"TREATMENT. The faint may often be prevented by attending to the cause

as stated above. The person in a faint should be laid flat on the back, and care should be taken that breathing is unimpeded. If care be not taken to leave the fainting person lying flat, death may ensue, but if this be attended to nothing more is usually necessary. Stimulants may be applied to the skin in the form of cold compresses on the head, slapping of the hands, pinching of the cheeks; or to the nose in the form of smelling-salts or eau-de-Cologne, or the pungent fumes of burnt feathers."

The book is published by the Macmillan Company, New York. It may be had postpaid through THE KANSAS FARMER at publisher's price, \$2.50.

Investigations of the U. S. Geological Survey have resulted in the collection of data that may lead ultimately to the introduction into general use of a new form of power—that developed by the gas producer and gas engine. The most gratifying discovery developed by this investigation is the fact that the cheaper coals—lignites that have heretofore hardly paid for mining—have been found, both in their natural condition and after briquetting, to be especially adapted to the production of power.

A SOUTHWESTERN DEVELOPMENT ASSOCIATION ORGANIZED.

The convention of Southwestern interests held at St. Louis last week was a large gathering of delegates from various sections of the vast domain lying west of the Mississippi River and south of the 40th parallel. The purpose was to promote a more complete development of the resources of a country whose possibilities have been but partially realized and slightly used.

The representations made by the delegates showed that the greatest need of nearly every section is more people. In some localities more and cheaper capital is needed, but in general, money is ready or easily obtainable.

The largest delegations were from Arkansas, Oklahoma, Indian Territory, and Texas. Kansas had but few representatives. It is fortunate for the State that Governor Hoch was there. He was more in demand than any other speaker, and his joyful devotion to and admiration of Kansas met a ready response.

The deliberations resulted in the formation of a permanent organization under the name "Southwestern Industrial and Development Association." The plan of organization is comprehensive, and if fully carried out should lead to more rapid realization on the dormant wealth of this great region.

The convention adopted the following resolutions reported by the committee:

Resolved, That we demand of Congress the immediate passage of a Statehood bill in the interests of Oklahoma and Indian Territory.

These Territories have met the requirements any set of fair-minded men should exact of them, and are entitled to have conferred upon them the right of self-government. The entire present condition of government in these Territories is to retard the industrial development of the entire Southwest, and is a crime against the civilization of this age.

Resolved, That a copy of these resolutions be wired at once to the President, Senator Beveridge, and Representative Hamilton.

Resolved, That we appeal to Congress to enact a law at its present session removing restrictions on the alienation of the surplus allotments of Indians in the Indian Territory of less

than full blood. We believe, after carefully studying the question, that the Indians of that Territory, of mixed blood, are taken as a class, as competent to manage their affairs as the average citizens of the several States, and to deny them this right is an insult to their intelligence, and will tend to discourage them, rendering them less fitted for citizenship than they are at present.

That the present law in force in the Indian Territory in its practical application is in direct line with the desires of the so-called grafters, and will result in the lands being bought up in piecemeal by that class of speculators, to the detriment of the bona fide settler and Indian owner, and to the hindrance of the industrial development of that section of the Union and the entire Southwest.

That it is the desire of the Indian owners of the land that the recommendations we make be embodied in a law.

We make this request to Congress after careful consideration of the question in all its phases, and believe that justice to the people concerned demands the passage of such a law.

Resolved, That a copy of this resolution be wired to the President, Secretary of the Interior, Senator Spooner, Senator Clapp, and Representative Curtis.

Resolved, That this convention heartily endorses the work of immigration now being carried on by the various railroad systems traversing the Southwest and desires to encourage such work by its moral support and hearty cooperation.

Resolved, That the various States here represented be urged to establish publicity and industrial bureaus through their several Legislatures and provide funds for the support of such bureaus, so that the advantages of the Southwest may be more advantageously and aggressively advertised.

Resolved, That this convention heartily endorses the work undertaken by the National Rivers and Harbors Congress, which convened at Washington, D. C., on January 15, 1906. That it recognizes the necessity for improving the waterways of the United States as the most potent and forceful means of internal development. That it recognizes the importance of having the Congress of the United States make more liberal and generous appropriations for the river and harbor work in the future. And it is the sense of this convention that the various clubs here represented give their hearty support to the work of raising funds to educate the people of the United States to the necessity of having such liberal appropriations made."

Resolved, That the commercial and industrial interests of the Indian Territory demand that some disposition should be made of the segregated mineral lands, whereby the surface of the lands can be cultivated, pending investigation of the lease conditions in that Territory proposed to be made by Congress.

That unless such provision is made thousands of acres of land will be allowed to remain idle, to the detriment of the business interests of that section of the Southwest.

Resolved, That a copy of this resolution be wired to the President.

Resolved, 1. That it is the sense of this convention that the United States should be represented by not less than seven commissioners in the Pan-American Congress to convene in Rio Janeiro, Brazil, in July of this year, and that at least one of them should be a resident of that portion of this country, lying west of the Mississippi River, and another of that portion of this country lying east of the Mississippi River and south of Mason and Dixon's line.

2. That this convention tender United States Senator Morgan, of Alabama, its thanks for calling the attention of Congress to the lack of representation of the sections herein named in said Pan-American Congress and causing means to be provided for the same.

Whereas, with the understanding that this convention when called had for its principal object the building up of our respective sections by securing desirable immigration; therefore, in order that this great subject of immigration may not be lost sight of in the multiplicity of other matters, it is resolved,

Resolved, That the great Southwest will most cordially welcome good people from any of the other States of the Union and from foreign countries.

Resolved, That in the Southwest section of this country there is a great field for the employment of labor at good wages, and an undeveloped empire of resources for the profitable employment of millions of capital now lying idle or bringing in only small returns in the Northern and Eastern States.

Resolved, That it is the sense of this convention that the question of immigration is paramount to all others, and that some plan should be formulated, that action may be taken in a decided and forceful manner. We recognize that nothing can be accomplished without financial aid, and we think that in addition to the duties of the vice president and secretary of each State and Territory, they should also be required to make and collect an assessment and advertise each State and Territory as a part of the Southwest.

The exercises closed with a banquet tendered by the St. Louis Mercantile Club at the Jefferson Hotel. About six hundred guests sat down at 8 o'clock. At 10 o'clock the speaking began. Several Governors and other persons of note had made their remarks by 12 o'clock, at which hour Governor Hoch was invited to respond to the toast, "Kansas." His attempt to cut short his remarks was met with many calls to "go on." The Governor did "go on" for over an hour with a speech in which argument and jollity were so intermingled and made to reinforce

BUY THE WAGON THAT'S MADE IN SAGINAW

The Handy Wagons made in Saginaw are made by men who know how a handy wagon should be made and who make it as it should be. That's why they last longer, run easier, carry heavier loads and give satisfaction. Farmers know the advantage of a low wheel, wide tire, light draft wagon—but there's more than one kind—the good and bad. To get the best, buy the

FARMER'S HANDY WAGON

made in Saginaw. We make them of the most durable material, hardwood, clear selected stock and first-class metal constructed on the most approved method. They are sold at a reasonable price, and built for a life-time of service. Our free 1906 catalog gives detailed description and tells why they are the best low-down farm wagons made. Write for it. Address

FARMER'S HANDY WAGON CO., SAGINAW, MICH.

Also makers of Handy Hay and Stock Racks and Handy All-Steel Frame Silos.

Branches at Kansas City and Des Moines.

each other that cheers came from even those who had advocated adverse views. One of the most telling periods was that in which he endorsed and admired the record and positions of Governor Folk, of Missouri.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year, and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

Miscellany

The Agricultural College Y. M. C. A.

The subscriptions for the Agricultural College Y. M. C. A. building are progressing favorably. The following letters to Secretary McLean have the right ring:

A FARMER'S LETTER.

Inclosed \$5 for your College Y. M. C. A. building. I think Kansas farmers can do nothing better for their boys than help complete this building and then contribute to the best possible work of that organization.

Manhattan, Kans. W. FRYHOFER.

THE GOVERNOR'S LETTER.

The effort made by the young men of the State Agricultural College to erect a Y. M. C. A. building in Manhattan for the benefit of the students of that institution and other young men is a noble one and worthy of every encouragement. When erected it will stand as a monument to the faith and work of these splendid young men, and of honor to the beautiful city in which it is located. E. W. HOCH.

Topeka, Kans.

Previously acknowledged....\$22,761.00
Elmer Everett, Partridge.....5.00
W. F. Milham, Waverly.....2.25
R. E. McHenry, Waverly.....2.25
Manhattan Grange Patrons
of Husbandry.....25.00
F. L. Williams, Agricola.....2.00
W. S. Fallis, Garnett.....5.00
"Right Hand".2.00

Total.\$22,805.50

Corn-Growing Contest.

The following boys will compete for prizes to be given by the Farmers' Institute, at Arkansas City:

Marvin Allison, E. W. Baxter, Loren Byrne, Ira Bahruth, Carl Burdzell, Edgar Buzzi, John Bossi, Laurel Brown, Ernest Brooks, Orval Baker, Paul Bryan, Fred Brewster, George Custer, Russell Chaplin, Lowe Coggins, F. E. Cunningham, Emmet Chamberlain, A. W. Elrod, Ray Fresh, Maurice Gibson, Arthur Gibson, J. B. Goff, Ray Griffith, Hiram Gill, Edward Goff, Roy Gilstrap, McKinley Goslin, Henry Good Fox, J. L. Hughes, Olley Ham, Roy Ham, Lee Holland, Leonard Heflin, Geo. Hayman, Lloyd Isom, John Kimble, Ralph Love, W. E. L. Littleton, Roy Luderwick, Wm. Lucas, Frank Magnus, Ray Morgan, Chas. Morgan, W. E. Meldrum, Joseph McCutcheon, Sylvester Mayhill, Carl Marshall, John Munice, Ernest Mosier, Harrison McMillen, Favorite McMillen, C. E. Owen, Claude A. Porter, John Parsons, John Parr, L. C. Parker, R. E. Parker, Carl Rambo, Austin Ramsey, Chas. Rinehart, Wesley Ridgeway, Floyd Reynolds, Chas. Randall, Elbert A. Robbins, Fred Robinson, Homer Shirley, Ray Shirley, Creighton Smothers, Eldon Shaw, Robert Somers, Cash Shellhammer, Harry Snyder, L. R. Scott, John Stark, Leslie Trout, Carl Wilson, Chester Wright, Leonard Wright, Ormond Warner, James Wilson, Herman Wilson, Otto Werther, Roger Werther, Harold Wilcox, Robert Williams, Marion Wing, Milo Zook.

The exercises closed with a banquet tendered by the St. Louis Mercantile Club at the Jefferson Hotel. About six hundred guests sat down at 8 o'clock. At 10 o'clock the speaking began. Several Governors and other persons of note had made their remarks by 12 o'clock, at which hour Governor Hoch was invited to respond to the toast, "Kansas." His attempt to cut short his remarks was met with many calls to "go on." The Governor did "go on" for over an hour with a speech in which argument and jollity were so intermingled and made to reinforce

Wire Fence 29c
48-in. stock fence per rod only
Best high carbon coiled steel spring wire
Catalog of fences, tools and supplies FREE
Buy direct at wholesale. Write today.
MASON FENCE CO. Box 62, Leesburg, Ga.

FENCE STRONGEST MADE. Built strong chick-en-tight. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalog free.
COILED SPRING FENCE CO. Box 255 Winchester, Indiana.

LAWN FENCE
Made of Steel. Lasts a life-time. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free.
KITSMAN BROTHERS, Box 399 Muscle, Indiana.

CURRIE WIND MILL CO., Topeka, Kansas.
\$10.00 Sweep Feed | \$14.00 Galvanized Grinder.
We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CEMENT FENCE POST or Building Blocks WITH THE Crouch \$10 MACHINE
Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.
Ellsworth Crouch, Oakland, Kansas

SCALES ALL STYLES LOWEST PRICES
PITLESS
30 DAYS FREE TRIAL
AMERICAN SCALE CO. 804 FIDELITY TRUST BLDG., KANSAS CITY, MO

WELL DRILLING MACHINES
Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.
WILLIAMS BROS., Ithaca, N. Y.

\$50.00 Split Hickory
SPECIAL TOP BUGGY TO ORDER
2-year guarantee. Sold on 30 days free trial. 100 points of superiority. Tell us what style vehicle you want. Send for 1906 catalogue free.
The Ohio Carriage Mfg. Co. H. C. Phelps, Pres. Station 251 Cincinnati, Ohio

THE CENTURY GRADER
Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks; Levels Land for Irrigation, Cuts Ditches, Clause Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled. Descriptive Catalogue FREE.
The WHITE CITY GRADER CO. Box F-7 WHITE CITY, KAN.

Modern Silage Methods
That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.
SILVER MFG. CO., Salem, Ohio.

Agriculture

Selection of Seed-Corn.

EDITOR KANSAS FARMER:—I have been a reader of THE KANSAS FARMER for some time and there are some things that are of particular interest to me and I think should be to every tiller of the soil. One of these things is corn and corn with a capital C. Men that try to raise corn should make it more of a business than they do and not do so much haphazard work. I believe that the first thing to take into consideration is seed, and I have found by experience that the best way to have good seed is to save it myself. I will give the plan that I followed for a number of years in Northeastern Iowa.

I found that seed selected late in the season when husking to crib would vary from one to four weeks in time of maturing, which in some seasons made a lot of soft corn. I found that to have corn that ripened uniformly you must plant seed that ripened at the same time, so I used to go through the field when the husks began to turn and select my seed for the next year. I selected ears of a certain type, of uniform size and maturity, and as near perfect as possible. I left husks enough on the ears to tie them together two and two, and hung them where they would dry thoroughly. When dry I sorted out the best, shelled them, and put the seed in barrels. I headed the barrels up and set them where no moisture could get to them. It was some trouble but the stand of corn I used to get from the seed more than paid for the trouble. I am going to follow the same plan in Kansas.

Franklin County. H. E. CURTIS.

Alfalfa Sown on Sod.

EDITOR KANSAS FARMER:—In your issue of March 22 J. J. Hyssell, of Rice County, asks about sowing alfalfa on sod. While the practice is generally discouraged in Eastern Colorado where people are coming in and starting new on their homesteads, there are several cases where the sod was broken 2 inches deep and harrowed well and alfalfa sown that have proven better than cases where alfalfa was sown on old ground, and we believe if sown just at the time of the spring rains it will grow better than when sown on old ground. Alfalfa sown here last spring is now up, and many roots have gone down over five feet as shown by digging. Crops that do well on Eastern soil do not do so well on Western soil, and I think alfalfa will do well on Mr. Hyssell's land if the soil is plowed shallow. Do not be afraid to use the harrow with teeth slightly sloped backwards.

HOWARD GAMBLE.

Kiowa County, Colorado.

Kentucky Blue-Grass for Pasture.

Will Kentucky blue-grass do well here for pasture? J. D. MITCHELL, Dickinson County.

Kentucky blue-grass may succeed fairly well in Dickinson County on low bottom-land and in draws where there is a sufficient moisture supply, but on the average farming-land of your section of the State, Kentucky blue-grass will not prove a very profitable grass to grow for pasture. It is possible that in time the Kentucky blue-grass will become well adapted and grow successfully in your part of the State. In this county (Riley) we find many pastures are becoming fairly well set with Kentucky blue-grass, but the grass is not so productive as other domestic grasses which we can grow. Bromus inermis and English blue-grass are superior to the Kentucky blue-grass in productivity, and the last-named grasses may be used either for pasture or for meadow. It is true that the Brome-grass and English blue-grass may not make so permanent a pasture as Kentucky blue-grass, and I do not recommend using them as permanent pasture, but rather as crops in rotation with other crops, the plan being to seed the land to grasses and clover or grasses and alfalfa and keep the fields in grass for four to six years, when the land should be broken and planted again with corn and other grain crops. Used in this way the Bromus inermis and English blue-grass are productive and profitable grasses to grow, and much larger crops of corn and other grain may be grown by using the grasses as a rotation crop than by cropping the land continuously with grain, as is too often the present practice.

There is no good domestic grass which we can grow for permanent pasture in Central Kansas. If the purpose is to continue the land permanently in pasture, better not break it up but let

the native wild grasses grow, and maintain the soil fertility by an occasional application of manure or other fertilizer and by disking where this is possible. There are probably no grasses so well adapted for growing in Kansas where the land is kept continually in grass as the native Kansas grasses.

A. M. TENNEYCK.

Handling Alfalfa Crop.

Last spring, about April, I plowed 10 acres of ground and left it fallow. In August I re-plowed the land to the depth of about 10 inches, and kept it harrowed down until September 1, when I sowed broadcast about eighteen pounds of alfalfa seed per acre and harrowed it once. I now have a fine, thick stand about four inches high which completely covers the ground. The land is fairly sandy and from 3 to 10 feet to water. I am at a loss to know how to handle the alfalfa. Shall I save any of the crops for hay? How often shall I mow it and when? Shall I mow it close to the ground or not? Please advise concerning best methods of handling the crop and I will follow instructions.

J. B. WANGLER.

Harper County.

You may cut the alfalfa regularly this season. Cut for hay as soon as the plants are about one-fourth in bloom. Mow close to the ground, the same as you would mow any other grass for hay. You ought to secure three good cuttings and perhaps four from this field during the present season. When alfalfa has become well established, as it is the second year after seeding, it may be cut closely and regularly as often as it makes a growth and comes into bloom. In fact it is urged that cutting alfalfa frequently causes it to grow ranker and more rapidly, and a larger production of hay may be secured by mowing relatively early at each cutting. The objection to allowing alfalfa to stand too long or until it is in full bloom before cutting for hay is that the leaves will be shattered more in making the hay than will be the case in harvesting less mature alfalfa, also the young shoots may start again from the crown of the alfalfa before the late mowing, and if these shoots are cut off it delays the start of the new crop and causes a less growth of alfalfa during the season.

A. M. TENNEYCK.

How Is Your Alfalfa?

EDITOR KANSAS FARMER:—I should like to hear how the alfalfa that was sown last fall looks this spring anywhere in Kansas. My guess is that it will be hard to find. Alfalfa will never become as noxious a weed in Kansas as it is in California and Nevada.

J. C. BALCH.
Ferndale, Washington.

Horticulture

The Earth Taste in Kaw Valley Potatoes.

EDITOR KANSAS FARMER:—It is a serious commercial mistake to so handle a crop as important as that of the great potato fields of the Valley of the Kaw in Kansas, as to have to market the product at a low price to make a sale at all because of the deterioration due to allowing an early crop to lie in the ground undug until they can be sold as a late crop. We refer to the earth-taste of potatoes, so plainly apparent to the taste, when the cooked vegetable is served upon the table, and so well known in Lawrence that the private families buy but a bushel at a time. When the householder buys in large lots he demands Northern potatoes or the Colorado Irrigation tuber, and ear after ear are shipped here from outside to take the place of the home-grown potato, which latter has to be shipped where it is not known. Still further we know of growers who raise and ship by the car, who carefully provide their own family supply by purchasing outside potatoes.

The cause of the faulty practice is, of course, a financial one. When the crop matures, the demand is strong and the price good; the crop is dug in haste and shipped; first returns are good; soon hot suns upon wet soil sunburn the potatoes before they can be picked up and sacked; the damage is not noticed; the cars arrive in bad order, and prices break so badly that shipments must stop. If weather conditions have been unfavorable, many potatoes have been shipped with the black sticky soil adhering. Every excuse given the commission-men helps beat down prices; the returns on some ears are ridiculous; on others there is a serious loss. Now here comes in the faulty

practice. If dug and stored in bins, the potatoes go through a sweat and soon rot—a total loss. If allowed to remain undug they keep perfectly until October some years, other years the earth-taste results. When they are dug and handled in late fall, they will keep in ordinary cellar-storage. Are they not in reality an early potato, dug and sold as a late potato?

CAUSES OF EARTH-TASTE.

Now what causes the earth-taste in the undug potato?

(1) Is it a sour soil from excessive wet as is mostly believed? (2) Is it hot sun on dry soil? (3) Is it hot sun on wet soil? (4) Is it the result of the grass-and-weed-sod which forms over the field? (5) Can it be that the tuber is readjusting itself to a new growth, and that this is the cause of the "taste?"

Next comes the problem of a modified field-practice to change the usual conditions prevailing. Running a lister between the rows has been found to be a partial benefit. If done as soon as the vines have died, it affords drainage and buries the crop a little deeper. How would a light application of air-slacked lime, applied with a manure-spreader, act to sweeten the soil? Millet as a catch crop over undug potatoes has been a success in parts of this State; will it act to help sweeten the soil, use up surplus moisture, and afford shade? How will oats-hay act? Sorghum will make a quick shade and will pump out lots of moisture and in the end will sweeten the soil, but it will leave a stiff stubble; will this stubble be harder to handle than the present weeds and grass? Cow-peas will make both shade and growth enough, but they maintain a decidedly moist ground-surface which might injure instead of benefit. So much for an effort to keep the fully matured and undug potatoes from acquiring the earth taste.

STORAGE IN SUMMER.

Now how far has experimentation gone in the successful storage during the hot summer months of the early-dug crop? Will cold-storage finally step in to give us a dry, above-chilling temperature? How small must be the bulk to prevent damage from the sweat? Can we break up the sweat by rehandling at the proper time? How would it do to lay sacked potatoes end for end upon the surface of the ground and cover with earth in a single lengthwise row? A few years since we piled in mid-summer thirty bushels of potatoes upstairs in the barn, every few bushels whitening the pile with a handful or two of air-slacked lime. They kept perfectly until late fall, the rot loss instead of being as usual several bushels was only a single dozen tubers in the thirty bushels. Besides, the lime made the potatoes dry and crisp like irrigated potatoes. But alas, we relimed the potatoes as we stored them in the cellar bins and before spring the lime had drawn the cellar moisture, the potatoes had sprouted, and the bins were an interwoven mass of sprouts and potatoes. Still the liming was a complete success in keeping down rot in loosely-piled, shaded potatoes.

Kaw Valley practice is to plant so very early in the spring as to even chance a late freeze or two. This, with Northern seed, will make the quickest possible crop return for an urgent market. So far so good. But why not confine this first planting to what the market will absorb at that time and plant a late crop for the winter demand?

The two main obstacles are that a too open soil at that time of year (July) prevents the even start of the seed-potatoes; and that it is impossible to hold seed-potatoes without deterioration to that late season. Now can not we go to the Southeast Atlantic States and learn something about second-crop seed-potatoes? Could we get such seed through refrigerator-car and cold-storage service? What can we learn from Michigan and the hill country of Colorado concerning the term-length of the late-crop potatoes, and gauge our planting to our climate?

Will THE KANSAS FARMER, with its unequalled facilities and great influence, kindly invite the potato-growers to take up this subject in its columns? Let us collate our experience, modify our practice where experiment will justify, absorb what experience we can from other fields, and continue to experiment with a view to raising the grade of our product and eliminating the earth-taste from the Kaw Valley potato.

EVAPORATED POTATOES.

Before leaving the subject I wish to refer to another phase of the matter. When the Klondyke rush occurred, a report got out of a new food product evaporated potatoes. Realizing its

There is no satisfaction keener than being dry and comfortable when out in the hardest storm.

YOU ARE SURE OF THIS

IF YOU WEAR

TOWER'S

FISH BRAND

'WATERPROOF'

OILED CLOTHING

BLACK OR YELLOW.

407 ON SALE EVERYWHERE.

A. T. TOWER CO., BOSTON, MASS., U. S. A.

TOWER CANADIAN CO., LIMITED, TORONTO, CAN.



A Roof Without Leaks

If you have ever had to climb upon the roof of your barn after a rain to patch the leaks, you know how annoying it is—not only that but consider the damage that was done before the leak was repaired. Is that the kind of roofing material that you want on your barn, house or any other building? Would it not pay you to buy

Mica-Noid

READY ROOFING

The roofing that is absolutely water-tight and will stay in that condition, a roofing that will not rust or rot and therefore requires no patching. Let us send you copies of letters which we have received from users of Mica-Noid, telling why they prefer it to tin, shingles or iron. We would like to send you FREE samples of this roofing. Write for them to-day.

ASBESTOS MFG. & ROOFING CO.

306 Carr Street, St. Louis, Mo.

Two Years Test



You don't want to make a mistake when you buy a buggy. We arrange matters so you can be sure you are right. We have our own factory and make what we sell. We will ship you this buggy or any other vehicle you may select from our catalog on

30 Days Free Trial Freight Prepaid

Then if you can find any flaw in it within two years we will replace it free and make you satisfied. Are we fair? We couldn't do this if we were selling other people's goods. And we couldn't do it unless our own were of highest quality. Don't forget, our prices are just about half dealers' prices. Send for catalog showing all styles and see for yourself. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

60 DAYS FREE

WE WILL SEND

any windmill we make to

any address to be given 60 DAYS FREE TRIAL; you compare it with windmills that others sell; two to four times our price, and if you don't find our windmill runs easier, has more power, requires less attention, easier to set up and handle (any farmer can easily set it up), pumps more water, runs in lighter wind, if you don't find it stronger, handsomer, better made and worth more than any other windmill made, return it to us at our expense and you can get out of our debt.

\$11.12 buys our new 1906 Kenwood all steel, nonbreakable, everlasting windmill, which anyone can set up in a few hours. \$12.98 buys our latest 1908 style, best and strongest all steel tower.

OUR FREE OFFER Cut this advertisement out on a postal card or in a letter to us say, "Send me your Free Windmill Offer," and we will receive, by return mail, postpaid, our latest big Special Windmill Catalogue, showing a great variety of pumping and power windmills in all sizes, a great variety of steel towers, tower tanks, etc. you will get all our Free Trial Offers, the most wonderful windmill proposition ever heard of.

THIS BIG POOL FULL SIZE COUCH TRIAL if you let us send you a windmill or other goods. You will also get this great Free Windmill Offer if you will write for our Free Windmill Address, SEARS, ROEBUCK & CO., CHICAGO

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor,

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)

Chicago, Ill.

importance I asked for information, with the result that a very vague report reached me that as an article of diet they were a disappointment; and as a new industry the evaporating of potatoes failed because of limited demand and the discoloring of the sliced potatoes as soon as cut. All the same, there is a fortune for the man who can evolve a partially prepared food from the potato, to take its place among the many other popular breakfast foods. Say, for instance, that the sliced potato was submitted for so many minutes to a roasting heat of so many degrees; the resultant product mixed equal weight with a carefully browned and roasted corn-meal and then put up in air-tight tin cans, tinfoil, or waxed paper. There is now upon the market and to be had at most groceries, a comparatively new product—Saratoga potatoes; the grocer gets a new supply several times a week from Kansas City—the thinly sliced potatoes are brought to a crisp brown in hot lard; are then drained and packed in pasteboard boxes lined with waxed paper. The grocer keeps them in air-tight glass until sold. As the lard becomes old the crispness changes to a wilted condition, but heating in the oven just before using restores the crispness. The retail price is sixty cents per pound and the demand is brisk for ladies' functions. Why not grind the Saratoga potato and press perfectly dry into cartridge form and wrap air-tight? But enough of this. Who shall discover a new product that will keep better than the tuber itself?

Since writing the above I came across an article from the pen of S. S. Clawson, of Ashwood, Tenn., who writes in part:

"Potato-growing has increased in a radius of five miles of Ashwood, and elsewhere in the country, until there were over 4,000 acres of the spring crop planted there last year. The spring crop must be shipped to market at once, or as soon as dug, as they are very perishable. Within the last few years the farmers of Maury County have been planting fewer acres of the first crop and more of the second, as the second is more profitable. The second crop need not be sorted for seed purposes, the small ones being as good for seed as the large. The second crop is a pure gift, as the seed comes from the small ones of the first crop."

Now, if any Kaw Valley growers have experience with Tennessee second-crop seed-potatoes, why not let it be known; if not, why not try them? Would it be possible to plant the late crop to follow a crop of oats or oats-hay? Let us get around the earth-taste if possible and raise the value of our product.

GEORGE WEST MAFFET.

Douglas County.

Spraying Pumps and Methods.

EDITOR KANSAS FARMER:—The rapid spread of fungus diseases will compel those who have large orchards to do some spraying with sulfate of copper to destroy fungus spores, notably the apple scab. The corrosive effect of sulfate of copper, blue vitrol, is such that the cylinder of the pump should be of brass. Iron and steel are very readily corroded and destroyed. In purchasing a pump it is well to select one that shall answer for spraying either with insecticides, such as Paris green, arsenate of lead, and disparene, or blue vitrol, a fungicide.

The pump should have considerable power and be capable of developing a heavy pressure. If the orchard is small and a hand pump is used, it is better to have a pump that can develop a pressure of sixty pounds than one of forty pounds. A pressure of one hundred pounds is very much better. There is, however, considerable doubt of developing one hundred pounds pressure without the use of a gasoline engine.

Experiments conducted in California indicate that a pressure of one hundred fifty to one hundred seventy-five pounds is still more effective. The farmer who simply sprays a family orchard will doubtless purchase a pump, costing \$12 to \$15, and mount it on the head of a kerosene barrel. The orchardist who has ten acres or more should purchase some one of the power sprayers geared to and driven by the wagon wheel.

The writer has used one of this class for fifteen years. Since power of this kind is utilized by driving along the row without stopping, a sufficient amount of misty spray can hardly be applied in the very brief time in which the wagon passes a tree. This defect may be partially overcome by driving and spraying twice around each row.

With an orchard larger than twenty-five acres across, it would be well to select a power sprayer driven by a gas-

oline engine. A gasoline engine of two or two and a half horse power can readily develop one hundred pounds pressure which can be utilized in making a finer mist of the spray and more surely forcing it into the calyx of the apple. There is also a saving of time, a matter of great importance since there are four to six days' time for the securing of the very best results in spraying. It is important that the orchard should be covered as rapidly as possible and thus utilize the very brief period before the calyx closes.

In the selection of the running-gear the tire of the wheel should be at least four inches in width and six inches would be better. R. A. Simpson, of Vincennes, Ind., bolted two three-inch rims, one on either side of a common farm-wagon wheel. In this way he secured a set of rims nearly eight inches in width. Equipped with wheels of this character he was able to haul his gasoline engine and filled tank over any ground that the horses could walk over, a matter of very great importance since it sometimes happens that on flat lands in extremely wet weather the ground becomes so soft that it is practically impossible to haul a tank filled with spray through the orchard.

In the selection of the pump it is imperative that it should be one which has an agitator, keeping the liquid constantly stirred up so the strength of the spray will be uniform. It is also well to use a pump having a revolving brush which will constantly keep the sediment and any stray twigs or leaves free from the base of the pump. Since the liquid must be forced through fine nozzles, the greatest care must be taken to keep the liquid free from lint or sediment which might clog the nozzles and impair the quality of the work.

BORDEAUX MIXTURE.

The ordinary formula in use is four pounds of sulfate of copper, five pounds of lime to fifty gallons of water. In order to dissolve the sulfate of copper and slack the lime with the least trouble perhaps the following suggestions may be useful in doing this work. Should the sulfate of copper be placed in the bottom of the tub or barrel it would not rapidly dissolve since the solution at the bottom becomes too strong to continue to dissolve. The best results are secured by suspending the sulfate of copper in a sack in the upper portion of the water.

The farmer who desires only a small amount for his few trees may dissolve four pounds of sulfate of copper in twenty-five gallons of water. He may put five pounds of fresh lump lime in twenty-five gallons of water. Lime slaked under water in this manner is less liable to burn than when slacked in large quantities in open air.

In uniting the solution of copper sulfate and the lime water, it is not well to pour one into the other but to pour a stream from each into a third barrel large enough to contain the united fifty gallons. The resulting solution is much more effective if the two separate solutions are poured in unison into the third barrel than if one is poured into the other. Those who have large orchards use elevated storage-tanks from which water is drawn off into smaller tanks, in one of which the lime is slaked, and in the other sulfate of copper dissolved. Streams from these are run into a third tank from which the spray tank is filled.

If fifty pounds of sulfate of copper are dissolved in twenty-five gallons of water, each gallon of this stock solution will contain two pounds of sulfate of copper. Doubtless, for many farmers it will be more convenient to measure out two gallons of this liquid and add it to twenty-three gallons of water and then combine a like proportion of the lime water for each fifty gallons desired.

ESSENTIALS OF SUCCESS.

1. Spraying materials should be properly compounded.
 2. The spray should be applied at the right time.
 3. The solution should be applied with such power as to create a fine misty spray.
- E. F. STEPHENS.
Crete, Neb.

The late Dr. Dashiell was fond of telling the following story on himself. "Preaching on one occasion at his old home, an old colored man who had taken care of him when he was a child was delighted with the sermon. At the close of the service he shook the doctor warmly by the hand, and said: 'Larry, you's a good preacher, you's a good preacher. I tell you, you's a soundin' brass and tinklin' cymbal.' Of the same sort was the colored woman's compliment to the cultured and affable Bishop Galloway. She said, 'Brother Galloway always do preach a powerful good tex'."

Williams' Shaving Soap

Using common soap for shaving is like washing your face with a mop. Fine work demands fine tools.

Shaving is a special operation. Williams' Shaving Soap is made specially for it. When you shave—do it right.

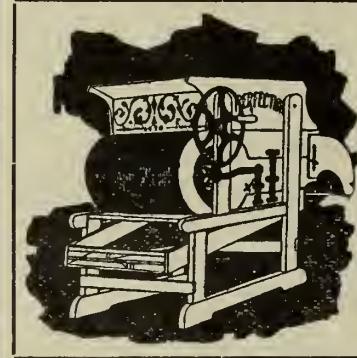
Send 2c. stamp for trial sample (enough for 50 shaves).

Williams' Barbers' Bar, Yankee, Mug, Quick & Easy Shaving Soaps and Williams' Shaving Sticks. — Sold everywhere. Address,

THE J. B. WILLIAMS COMPANY,
Dept. A, Glastonbury, Conn.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: ::



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

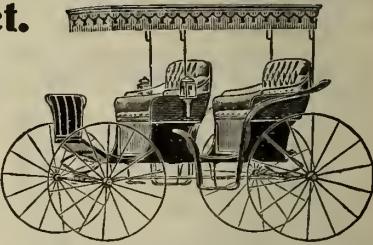
33 Years Selling Direct.

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price.



No. 647. Top Buggy. Price complete, \$40.00. As good as sells for \$25. more

We are the Largest Manufacturers in the World



No. 331. Canopy Top Surrey. Price complete, \$60.50. As good as sells for \$25. more

ELKHART CARRIAGE & HARNESS MFG. CO., ELKHART, INDIANA.



All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri.

Great American Desert Seeds are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drought tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. Blackman, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

McBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

Stock Interests**PURE-BRED STOCK SALES.**

Dates claimed only for sales which are advertised or are to be advertised in this paper.

May 1, 1906—George Allen, Omaha, Neb., Shorthorn.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, Des Moines, Iowa, Manager.

October 2-3-4, 1906—Glasco Live Stock Association sale of pure-bred stock, Glasco, Kans.

October 17, 1906—Poland-Chinas, W. A. Pruitt, Asherville, Kans.

October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.

October 20, 1906—W. R. Dowling, Norcatur, Kans., Poland-Chinas.

October 24, 1906—Poland-Chinas, Frank A. Dawley Waldo, Kans.

October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.

December 4, 1906—Poland-Chinas, Lemon Ford, Minneapolis, Kans.

Feeding Cattle for Market.

R. J. KINZER, ANIMAL HUSBANDRY DEPARTMENT, KANSAS STATE AGRICULTURAL COLLEGE, AT THE KANSAS IMPROVED-STOCK BREEDERS' ANNUAL MEETING, JANUARY 8-10, 1906.

The world's greatest problem is now and always has been its food supply. Wheat, or its products, is the great staff of life among the cereals, and beef is man's staff of life among the meats. In the United States we consume something like 14,000,000 tons of grain as human food and about 6,000,000 tons of beef annually. The amount of beef consumed annually by each person in the United States amounts to about 150 pounds. Thus we see that the problem of furnishing beef for our own people is by no means a small one, to say nothing of our export trade.

To be a successful cattle-feeder requires something more than muscular exertion. What to feed, how to feed, and when to feed are all questions that must be settled or the profits will not be burdensome; no matter how carefully a man may feed or how well he may prepare his feeds, unless he has the right kind of cattle his profits are not going to be great. Therefore, one of the first essentials in the profitable production of good beef is a thorough and clear conception of what constitutes a good feeder. A scrub Jersey or Holstein steer may make as many pounds of gain from a bushel of corn as a Shorthorn, Hereford, or Angus, but in the first case you are producing a cheap grade of beef, while with the steer of a good beef type and a good feeder, every pound of gain is worth from one to three cents more than that of the scrub. And there is certainly much more pleasure in feeding a good hunch of cattle than in feeding a poor one.

As to what time of year is the best to feed is a question on which feeders differ greatly. Many of our largest cattle-feeders claim they can not afford to feed during the winter months, as it requires more feed per pound of gain. And then the question of shelter and yards is also important. If cattle are expected to gain well and be profitable, they must be kept comfortable, but this can not be done in a small, muddy yard where only poor shelter has been provided. This is a subject on which there is much difference of opinion. The stockmen of the New England States give more attention to the care of their beasts than the farmers of the Mississippi Valley; and the farmers of the Mississippi Valley spend more time in caring for their stock than the ranchmen of the West; and our Scotch and English friends give more attention to the care and comfort of their animals than all three of these classes just mentioned. And we Americans go over there and pay them good prices for thus caring for their cattle, and then wonder why we can't raise as good cattle in America as they do in England or Scotland.

Perhaps you will say this has little to do with the fattening of cattle. Perhaps it has; but to produce the best carcass of beef the most economically the beast that is to produce it must be started aright, and this can not be done unless his ancestors have been properly cared for and fed.

So, first of all, look to the comfort of the breeding herd. The general health of the herd needs consideration.

DIPPING BOGS AND CATTLE IN KANSAS.

Professor R. J. Kinzer, head of the Animal Husbandry Department of the Kansas Agricultural College, writes: "We have used Zenoleum exclusively as a dip and disinfectant for our hogs, sheep and barns during the past season, with the best of results in all cases, and can give it a most hearty endorsement." You can get Zenoleum of the Zenner Disinfectant Company, 61 Lafayette Ave., Detroit, Mich. It only costs \$1.50 per gallon, express paid. "The Zenoleum Veterinary Adviser" can be had free on application. We urge you to write for it.

also the rearing of the calves with the least cost or drain to the parent's system, and the maintenance of maximum vigor in the herd. On the other hand, overcare is as detrimental as the lack of care. A life of ease, comfort, luxury, and freedom from exertion will lead to a low condition of the system. Treat the breeding herd in such a way as to produce strong and active calves. Give them plenty of good, clean feed, ample shelter, plenty of sunshine, and plenty of exercise, but do not pamper until they degenerate. The results of an experiment some years ago at our own experiment station show that there was a saving of twelve per cent in the cost of feed on steers well cared for as compared with those that had but poor shelter and care. The life of a beef animal is intended to be a short one, and the aim of the owner should be to crowd to maturity and market at as early an age as possible. What is more miserable to look upon than a herd of wet, cold, poorly-fed, and poorly-sheltered, shivering cattle, standing as close together as possible, for protection from the blasts of a storm, with their heads on the ground and their tails to the storm? Such exposure not only will exhaust the vitality of the best of beasts, but it is cruelty and an extravagant waste of feed.

What we want in our fattening cattle is maximum weight at a minimum cost. And under cost consider the length of time which they are to be fed, the amount and kind of feed which they are to consume, and the value of the yards or pasture which they are to occupy.

The price of land has increased; feeds are too high in price and the price of cattle is too low for us to make it a profitable business to feed as was the method fifty years ago. Cheap pasture lands and the free range are almost a thing of the past, and our cattle now must be turned to market at an early age. Grass is the most natural feed for cattle, and it is hard to get any combination of feeds that will equal it for cheapness of gains. Summer feeding on grass is preferred by many to winter feeding. One of the largest cattle-feeders that ever operated in this country said that he could not afford to feed during the winter months. But the average farmer has considerable more time to do feeding during the winter months than he has in the summer; and this is perhaps why we find so many feeding in the winter. I was unable to find figures giving a comparison of the relative cost of summer and winter feeding; but the averages of 100 experiments with hogs in winter and 99 in summer show a saving of 11 per cent in favor of summer feeding. A great many who summer-feed find cottonseed cake about as economical as any feed to use in connection with grass. Cottonseed-meal or cake will produce fat as fast as any feed we have, but the price of this product is hardly in keeping with the price of fat cattle, and there is some objection to it on account of its sometimes causing sickness, or what is called cottonseed poison; however, this is seldom seen when cattle are on pasture. If used for dry-lot feeding it should not be fed for too long a period or in too large quantities.

Corn will perhaps ever hold its place as the chief feed for fattening cattle, and it is safe feed for either grass or dry-lot feeding. When feeding on grass, soaked shelled corn can often be used to advantage. By using a wagon tank, soaking is a cheaper operation than grinding, and experiments show that there is a saving of 15 per cent in favor of soaked corn as compared with whole shelled corn, and about 5 per cent can be saved by soaking where there are hogs to follow the steers. Ground corn is always preferable to whole corn where the expense of grinding is not too great. Corn-and-cob meal in nearly all experiments has proven about equal to corn-meal as feed for steers. This gives fourteen pounds more feed per bushel of corn, but the expense of grinding is considerably more with the corn-and-cob meal than with corn-meal.

When the price will permit, bran may often be used to advantage. Steers fed on bran and hay by the Pillsbury A mills, of Minneapolis, made an average daily gain of nearly two pounds per day for a period of four months. Two or three pounds of bran, fed in connection with corn-meal, will often prove a valuable addition to their ration.

Oil-meal has long been used as a food for fattening cattle, and with good results in most cases, when fed in connection with corn, but it is a too highly concentrated, nitrogenous food to be fed alone with profit. At the Kansas station it required 732 pounds of oil-

Farmers Say**SLOAN'S LINIMENT**

**Is the Best Remedy on Earth.
Kills a Spavin Curb or Splint.
Very Penetrating. Kills Pain.**

DR. EARL S. SLOAN, 615 ALBANY STREET, BOSTON, MASS.

BLACKLEGIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill. Just a little pill to be placed under the skin by a single thrust of the instrument. An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVIS & COMPANY. DETROIT, MICHIGAN, U.S.A.

BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U.S.A.; Walkerville, Ont.; Montreal, Que.

The Continuous Stay

is what gives Advance Fence its superior strength. Our stay wire is never cut, but is woven into the margin cables from one stay to the next—continuously up and down for many rods without an end. Thus all the strength of the wire is retained for service—not wasted—as in cut stay fences. This is really the only correct way to weave a fence, but it requires complicated machinery and is a little slower—but when you consider the difference in results, its worth while—it produces a fence about twice as strong with the same wire.

30 Days Free Trial. Place your order with us for what fence you need and try it. If after 30 days you would rather have your money back, just return the fence to us at our expense and you shall have your money by return mail.

We Prepay Freight on 40 rods or more and guarantee the safe delivery of your shipment by the R. R. Co.

Write now for our free fence book and wholesale delivered price—right now.

ADVANCE FENCE CO. 3777 Old Street Peoria, Ill.

**Save Money on Oil**

We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

Our Premium Machine Oil is sold at \$3.50 per barrel. Thousands are using it and find it all right.

Every barrel guaranteed, and you be the judge. Other oil costs 35c to 40c per gal.; ours costs \$3.50 per barrel. Freight rate is 32c per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2c.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission. WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

Profitable Stock Feeding

...by....

H. R. SMITH, PROFESSOR OF ANIMAL HUSBANDRY, NEBRASKA UNIVERSITY.

How to feed for beef, milk, mutton, Poultry and Pork with chapter on the horse. More than 400 pages. Beautifully illustrated with portraits of typical animals of each class. Price \$1.50. Given with one year's subscription to The Kansas Farmer for only \$2. Address,

KANSAS FARMER CO., Topeka, Kansas

DO IT NOW.

Horse Owners! Use GOMBAULT'S Caustic Balsam

A Safe, Speedy, and Positive Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all bunches or blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and other Sore Eyes, BARRY CO., Iowa City, Ia., have a cure

STOLL'S STAY-THERE EAR MARK.
The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send or samples. W. C. Stoll Brothers, Hob

DOLLAR GALLS
not interfere in the least with your work, if you will use
BICKMORE'S GALL CURE
Guaranteed to cure all harness, saddle and saddle galls, spur cracks, stretching and cracking. Look for our book, "Bickmore's Horse Book and 1-oz. box Bickmore's Gall Cure FREE for No to Pay Postage. Write today. Sold by dealers. Bickmore Gall Cure Co., Box 916, Old Town, Maine.

Ring-Bone

There is no case so old or bad that we will not guarantee

Fleming's Spavin and Ringbone Paste
to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Spavin and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

Fleming's Vest-Pocket Veterinary Adviser
Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durably bound, indexed and illustrated. Make a right beginning by sending for this book.
FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Manufacturers of Clipping Tanks, 1501-03 Genesee St., Kansas City, Mo.

ONE MINUTE STOCK DIP

LIVE STOCK INSURANCE

The cheapest insurance you can get is a DISEASE PREVENTIVE. Don't wait to cure disease—keep it away from your live stock. You can do it with

Dipolene

which kills all disease germs, sheep ticks, scab, lice, fleas and all body vermin. Perfectly harmless. Promotes health, spirited up barns and lots keeps them sanitary, wards off disease. Write for FREE book "DIPPING FOR DOLLARS."

MARSHALL OIL CO.
Box 13
Marshalltown, Ia.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas

meal and 814 pounds of hay to produce a hundred pounds of gain. At the present prices this would make a hundred pounds of gain cost about fourteen dollars.

In our feeding experiments we have been unable to find any combination of feeds that will equal corn-and-cob meal and good alfalfa hay; and at the present prices of the various by-products, we doubt if there is much economy in feeding any of them.

Last winter at the Kansas station, with 2-year-old Shorthorn steers fed 219 days, it required 612 pounds of alfalfa and 690 pounds of corn-and-cob meal to produce a hundred pounds of gain, and the cost of gain was six and a half cents per pound.

One mistake that is sometimes made is turning on pasture, steers that have been heavily grained during the winter. This is usually a losing operation, and the more radical the change from the dry lot to the pasture the greater will be the loss. The increase in the cost of gains as the age of the steer increases and as the length of the fattening period increases are factors that must not be overlooked. We find that it takes all the way from 400 to 1,500 pounds of feed to produce a hundred pounds of gain, the amount depending on the kinds of feed used and the length of the feeding period.

From a fat-stock-show record, the cost of gain is given as \$4.03 for calves, \$7.98 for yearlings, and \$12.54 for 2-year-olds. The amount of grain required per hundred pounds of gain increases about 10 per cent after 60 days, 15 per cent after 90 days, and 20 per cent after 120 days.

With the most careful feeding and the very best care, we can not hope to produce the highest class carcass of meat unless we have the right kind of a machine for the changing of our farm products to beef, and we must all concede that "blood tells" in beef production as much as anywhere.

Kansas is producing good cattle, and she can produce still better ones by using a little better blood, by giving the old cow a little better feed and a little better shelter.

DISCUSSION.

Mr. Martin: There is one question I would like to ask that is agitating the farmers some; that is the subject of summer feeding and winter feeding. Now, in making up this statement, was the price of grazing land taken into consideration in summer feeding against winter feeding?

Professor Kinzer: Certainly; this considered the whole feeding question.

S. C. Hanna: In this connection, I wish to inquire of Professor Kinzer if he has noticed Mumford's report from the Illinois Experiment Station? That experiment demonstrated (at least my conclusions were) that the cheapest possible beef gains were from broken car corn and clover hay (I believe they had no alfalfa) and a moderate amount of oil-meal.

Professor Kinzer: The results are contradictory to those from experiments in recent years. Ensilage ranks with corn and corn-meal and corn-and-cob meal in producing rapid gains in fattening cattle. Corn-meal and corn-and-cob meal seem to be of about equal efficiency in producing quick finish. In this test more rapid gains were secured with whole than with shelled corn, and equally as good as with meal. A reasonably quick finish may be secured without the feeding of an extremely heavy grain-ration. Where conditions are such as prevailed in this experiment, corn-and-cob meal is not so valuable for fattening steers. The presence of cob in ground corn does not materially increase the efficiency. Whether or not cattle-feeders should use ground meal or corn-and-cob meal largely is a matter of convenience.

Mr. Elmer: I heard the professor say something about silage being equal to corn. Does that mean pound for pound?

Professor Kinzer: Silage ranks with ear corn and corn-and-cob meal in its ability to make rapid gains in fattening cattle. Last winter at the station we fed a bunch of steers on ensilage; that is, we supplied ensilage in place of corn as far as we could, and we did not find it to make any cheaper ration than feeding straight corn and alfalfa.

Mr. Elmer: Have you any figures for feeding snapping corn

Professor Kinzer: No, I have not.

J. C. Robison: The gentleman spoke of feeding ear corn. We have been experimenting a little this fall in that respect—not with cattle, but trying to make flesh on horses, and we have been experimenting with a bunch of fifty 2-year-old stallions, part outside and part inside of the barn. Those on the outside we began feeding snapping corn and alfalfa hay, and they are still get-

ting ear corn, and they have gained two pounds per day; and those we had in the barn, on ground corn and oats and bran, with not to exceed one pound of oil-meal, are gaining close to four pounds a day; and we find that we can put a pound of meat on colts outside for just about half the cost of those inside the barn.

J. W. Robison: You see in that experiment the object in the outside horses is to grow them up to a point where they are ready to take on flesh. The ones in the barn have reached that point and are taking on flesh. They get no very increased quantity or quality of feed, but they get currying, and they get bedding, and the best possible care to put finish on them. In speaking of the quality of the two lots, I think it is safe to say that nobody ever comes and buys a colt out of the pasture. It's hair is rough; it is not as ambitious. It appears that no man is good enough judge of a horse to buy a horse that is not put in good condition in competition with one that is. Now, as to those experiments that are given from Illinois: nobody disputes the truth of any bulletin that Mumford sends out; but we don't know the condition of the silage; it is not told what it is composed of. There is silage, and there is silage again. I find when I feed cattle cobs, unless they are ground extremely fine, that you can pick up little particles of cob practically undigested. It may be said that it lightens up the food and aids digestion, getting the nutrient out of the corn better. That would be very good if there was no better way of doing that. A little bran, a little chopped hay, a little alfalfa, makes a very good thing to lighten up the corn-meal and not let it lie in a dough state on the stomach. About the best place I know of to run corn-cobs through is a cook-stove, with a good piece of beefsteak on top of the stove. If we have to feed cobs, they should be run through the grinder first. The question was broached here about feeding on grass. I have fed from 150 to 200 cattle on a pasture every summer with grass and corn. We take those cattle out of stock-cattle, some of the most mature, and about March 1, I turn them out on that grass pasture and, in place of the half-bushel of corn that we gave them in the dry lot, give them about a peck. About four years ago, when corn was worth seventy-five cents a bushel and wheat hardly as much, we fed them wheat, because there were four pounds more of wheat in the bushel. We put cottonseed-meal with all of it. Now, the corn is not much more than half the price of cottonseed-meal. Corn with us is worth thirty-five cents; so you see the price of the two kinds of feed—of all kinds of feed—should be a large factor in determining the quantity of each kind that the animal should consume to reduce the cost to the minimum. The best feed is pure grass because it is cheapest—with this peck of corn or an equivalent and oil-meal. Hogs follow, and we make nearly three pounds of beef and one of pork out of every bushel of corn; that is, feeding for several years it runs something near that—sometimes exceeds it, sometimes runs a little below.

President Potter: Did you ever select a bunch of cattle as you selected these and put them on grass alone and see what they would do?

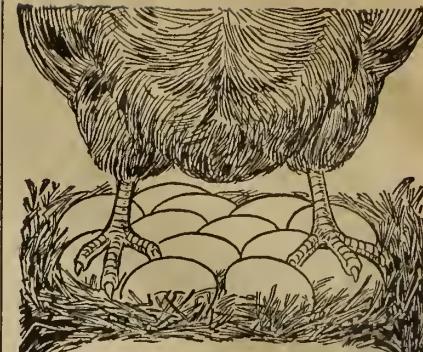
J. W. Robison: It will vary some; we do not always take the best cattle, but we take the most-matured ones. I think that a fair sample of the different kinds of cattle as to taking on flesh.

C. E. Westbrook: I would like to say one word to you farmers in particular in regard to Mr. Robison's talk—in regard to feeding those colts. The colts get a very much better growth—make more useful horses and get more muscle—when outside than they do when kept in the barn. This mere laying on of flesh on horses is not the valuable stuff for us, particularly in Kansas. As Mr. Robison said, people do not buy on their judgment as they do on looks.

Mr. Blair: A point of vital importance has been touched upon, and that is the matter of breeding stock. Whether it is best to bring them up outdoors on bran and muscle-producing feed, or indoors; whether it is the best way to let them rough it a little, or keep them up and feed them well and make them mature early, and keep them plump and so they will hold their heads up well. It is my opinion that it is the very best feeder that makes the very best breeder.

Mr. Westbrook: There isn't a horse in his stall, unless he has been abused, but what will go out and exercise. You must give them liberty.

J. W. Robison: I did not think that it needed explanation about the bene-



A Setting Hen

would not be annoyed to death with lice if Instant Louse Killer was sprinkled over the hen and into the nest. She cannot get away; the lice feast happily on the feathered martyr to maternal instinct.

INSTANT LOUSE KILLER

(Powder or Liquid)

will make the setting hen and all her children happy. It destroys lice on poultry stock and ticks on sheep. It kills bugs on cucumber, squash and melon vines, cabbage worms, slugs on rose bushes, etc. Instant Louse Killer is the original powder louse killer put up in round cans with perforated top. Be sure of the word "Instant" on the can—it has twenty-five imitations. If you will sprinkle Instant Louse Killer on the setting hen and nest, we will guarantee the brood will come off free from lice; it is also a reliable disinfectant and deodorizer.

1 lb. 25c. { Except in Canada
3 lbs. 60c. } and extreme
West and South.

If your dealer cannot supply you, we will forward 1 lb. by mail or express, prepaid, for 35 cents.

Sold on a Written Guarantee.
Manufactured by
DR. HESS & CLARK,
Ashland, Ohio.

KRESO DIP
KILLS LICE
ON ALL LIVE STOCK
EASY & SAFE TO USE

BLUE CATTLE LOUSE
KRESO DIP
KILLS THIS AND ALL OTHERS
RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write For Free Booklets
For Sale By All Druggists

PARK, DAVIS & CO.
HOME OFFICES AND LABORATORIES:
DETROIT, Mich.
BRANCHES: New York, Chicago, St. Louis, Boston,
Baltimore, New Orleans, Kansas City, Indianapolis,
Minneapolis, Memphis, U.S.A.; Walkerville,
Ont.; Montreal, Que.

The more I use the press the better I like it. In fact I think it is a dandy. I put the prettiest bales of timothy on the market that go from Olath, C. V. Frye, Olath, Kans.



Satisfaction guaranteed. Manufactured by the AUTO FEED HAY PRESS CO., 1084 Jefferson St., Topeka, Kansas

SPREADING TEST 30 DAYS



FREE

YOU can use this American Manure Spreader a month **FREE** to prove it is as represented. Upon receipt of your order, we will ship the Spreader promptly and *prepay the freight*. Use it 30 days on your farm. If you don't find it all we claim—send it back at our expense. *The test won't cost you a cent.*

We make you this offer because we know what the American Manure Spreader will do. **We know it will Pay for Itself.**

You get this unusual opportunity because we make more high grade Manure Spreaders than any other concern in the world.

That's why we can give you this chance to test our Spreader in your own way in your own fields.

American Manure Spreaders are made right.

We are old established manufacturers. We buy everything in big quantities. Thus we always get the very best at rock bottom prices.

Our men are experienced. They have been building Manure Spreaders for many years.

This means the best possible machines at the lowest possible cost.

We sell *direct to you* because we are able to give you much better value for your money and a better understanding of the machine than any one else could. We always keep in close touch with our customers. They tell us just what our Spreaders are doing, and we keep the standard of our machines so that every penny you pay us comes back to you in full Manure Spreader value. *We do not belong to any Trust or Combination. We are an entirely Independent Concern.*

The American Manure Spreader of today represents the highest development in Agricultural Implements building.

It is absolutely modern and up-to-date.

It is a sensibly and practically built machine.

Nothing about it is exposed to unnecessary strain. There is no complicated mechanism to get out of order. Every part is made extra strong and all are substantially put together.

The American Manure Spreader doubles the value of every bit of manure you put on your land. It breaks up and pulverizes it thoroughly. The distribution is uniform. Every foot of your land gets its share, and the manure is in such shape that it mixes easily with the soil.

After using the Spreader **A Month FREE**, you can take time to pay for it.

It may earn its cost before you remit us any money.

Send for particulars of our generous proposition today.

You will be well pleased if you do.

If you tell us the number of acres you cultivate, and how many horses, cattle, sheep and hogs you keep, we can give you the Government statistics as to value of your manure crop.

Write to us today. Do it now!—before the matter has a chance to slip your memory. Address—

AMERICAN HARROW CO.

10130 Hastings Street

Detroit, Mich.

nt of action in a horse. A horse is not like Mr. Kirkpatrick's hog, which is merely laying on so much flesh. No horse can develop speed and action without having room to practice. Now, no colt, be he draft or any other breed, can develop that straightaway action unless he has opportunity to practice it. We are not trying to finish those colts out there. We do not want to finish them down; we do not want them too fat; so we just keep them in that pasture until they are thrifty. We often give them bran and oats and a little forage, to assist in making the bone and blood, and muscle.

Mr. Keats: I would like to ask Mr. Robison how he expects to make the most clear money out of the feed?

J. W. Robison: As I said, I think we never sold a colt out of the pasture. His hair is rough and thick and he is not kept up. They are all one class of horses coming right up. We take the most mature ones and the ones ready for market and put them in the barn and finish them, and the profits come in both bunches. We never want to put a horse on the market unless he is conditioned up and fit for sale, just as a good cattle feeder will condition his cattle. The money comes out of the ones in the barn.

Secretary Heath: Last year on this subject we had quite a discussion—an extra-good paper by E. B. Mitchell, who is manager of the Tebo Lawn Shorthorns, one of the greatest show herds in this country—and he summarized this question briefly. He said:

"We, as improved-cattle breeders, are supposed to be manufacturing beef by the improved method, and I firmly believe that the feeding qualities of even pure-bred cattle can and will be endangered by the overindulgence of the idea that fat cattle will not breed. How frequently we see very promising animals pass through a sale ring whose misfortune it is to fall into the hands of some misguided victim of this teaching, and for lack of proper care pass forever into oblivion! Is it not a fact that an animal worth owning is deserving of good care? If we were to take an invoice of our pure-bred herds, I am sorry to say that we should find some that have become impoverished for lack of sufficient foodstuffs to develop the young things into the massive, broad-backed animals of which we read, and to which we point with pride. That this is a vital point in the future of the pure-bred cattle business there is no doubt in my mind. Every home of pure-bred cattle should be a living example of these higher ideals and a school of instruction to the novice. And now, for fear of being misunderstood in this connection, I wish to say that good keep does not necessarily mean show-yard form, and yet I firmly believe that the more this is cultivated the more inherent the fleshing qualities become. Prices on pure-bred sires are now within the reach of all, and let us breeders put forth every effort to make the contrast of individual merit between the pure-bred and the scrub greater than ever before, at the same time placing ourselves in position to say, as would the Jewish vendor, 'He has dirt sheep. You never got so much for your monies!'"

Professor Kinzer: It makes no difference whether raising horses or cattle, the most essential thing is plenty of sunshine and plenty of exercise. Do not feed your animals too much corn and give them some alfalfa. Now, as to the feeding indoors and outdoors: we find that in nearly all cattle experiments gains can be made a little more economically when fed inside. Good open sheds will make larger average gains, but the gains will be a little cheaper inside than out. As to the cost of grinding, we find it costs twice as much, or a little more, to grind cob-meal than it does to grind straight corn-meal. Professor Mumford's statements are rather contradictory to this. Bran is better than cob, but when you can get the cob for the grinding I think it the more economical than to use bran.

The Brown County Breeders' Short-horn Sale.

Under the efficient management of Everett Hayes, of Hiawatha, the Brown County Improved Stock-Breeders' Association held its first annual sale at Hiawatha, Kans., on Thursday, April 19. This was a combination sale made up of animals selected from the herds of G. Y. Johnson, Willits; T. J. Sands, Robinson, Everett Hayes, Hiawatha; John McCoy, Sabetha; Jas. P. Lahr, Sabetha; Ed. Schuler, Falls City, Neb.; A. F. Robinson, Morrill; Bert G. Wise, Reserve; Geo. Mannville, Faustette, Mo.; and W. W. Brown, Weston, Mo.

The animals were in good shape generally and the sale was a lively one. Col. Geo. Bellows, of Maryville, Mo., was at his best and conducted the sale in the most satisfactory manner. He kept the crowd in a good humor by his ready wit and spirited manner of handling the business and got every dol-

lar the cattle were worth in most cases. Owing to the large number sold there were of course many bargains, but both the consignors and purchasers seemed well pleased with the results. The crowd in attendance was a large one, and was composed of farmers from the country adjacent to Hiawatha with the exception of a few from a greater distance. Most of the stock was sold to local buyers and the sale may be regarded as a great missionary effort which will insure a permanency of the Shorthorn breed and the success of future sales by this association.

Fifty head of cattle were sold, though only 48 of these were included in the catalogue. Of those catalogued 30 were females which brought \$2,270, an average of \$75.66. The 18 bulls brought \$1,667.50, average \$92.64. The 48 catalogued animals sold for \$3,937.50, average, \$82.03.

From these figures it will be seen that the demand for bulls was fairly good, while the females did not sell so well. It should also be stated that there were a good many young animals in the offering which served to reduce the average.

In addition to the animals catalogued, there were two bulls sold for \$85 and \$87.50 respectively. These are not included in the averages given.

Animals bringing \$100 or more sold as follows: Lady Alexandrian 5th, W. E. Smith, Baker, \$132.50; Hannibal's Beauty, Leo Deuhn, Leona, \$130; Nancy Belle, Ray Callan, Hiawatha, \$105; Lyda, John McCoy, Sabetha, \$160; Benson, N. B. Hanson, Willits, \$130; Lilly, T. J. Sands, Robinson, \$100; Scottish Hero, W. P. Lair & Son, Horton, \$175; Loudon Duke 234108, E. T. Byers, Hiawatha, \$120; Maid's Lad 243874, A. R. Walters, Baker, \$115; Prides Model 242486, T. J. Whelan, Mayetta, \$140; Baron Mysie 176261, Geo. Mannville, Faustette, Mo., \$150.

Other buyers were W. B. Fordyce, Powhatan; Boyd Overfield, Hiawatha; John Hall, Powhatan; A. B. Vandyke, Sabetha; E. D. Ludwig, Sabetha; J. N. Richards, Hiawatha; Phil Mahoney, Reserve; C. D. Havens, Mayetta; Stephen John, Hiawatha; Jackson Hart, Hiawatha; A. A. Hoverson, Troy; A. F. Robinson, Morrill; Louis Kenistada, Home; J. W. Field, Hiawatha; Ira McCoy, Sabetha; David Davis, Hiawatha; J. F. Reeler, Hiawatha; S. W. Round, Hiawatha; T. J. Dawee, Troy; Finley McCray, Baker; T. S. Wise, Reserve; J. C. Berry, Hiawatha; W. W. Brown, Weston, Mo.; N. B. Hanson, Willits; Hans Torkelson, Hiawatha; M. A. Murphy, Willits; Frank Van Dolsen, Fairview; J. O. Hetler, Hiawatha.

Arrangements have been made for a second sale to be held this fall, probably in November.

Allen's Pure Scotch Shorthorn Sale.

It has been a revelation to many Shorthorn breeders in the West, to know that Geo. Allen, of Lexington, Neb., has so many well-bred Scotch cattle, and to learn that he will make a public sale May 1, of nearly 50 head at the South Omaha sale pavilion. Mr. Allen reports eight calves dropped by the young cows booked for this sale and there will be others before May 1. There has been an unusually large demand for sale catalogs, which shows a wide and growing interest in straight Scotch breeding such as is found in Mr. Allen's consignment to this sale. The sale catalog shows the breeding of this lot of cattle, giving the names of the breeders of the dams, as well as of the sires so that one can see for himself how richly these cattle are bred and tell what is meant by straight Cruickshank breeding. The entire offering is a select lot and will enter the sale ring in prime condition, affording an opportunity to get foundation stock, herd-headers and prize-winners that should not be neglected by the enterprising and successful breeder. In the advertisement in this issue, note the breeding of the two young bulls; No. 8, Barnpton Duke 2d is a very fine young bull of pure Scotch breeding, belonging to that grand old family, known as Barnpton Butterflies. No family of cattle stood higher in Mr. Cruickshank's estimation. Barnpton Flower in this pedigree was the dam of the great breeding bull, Barnpton 37763, that sired Earl of Aberdeen, Baron Victor, Spartan Hero, and others, to which is largely due the popularity of the Cruickshank cattle of to-day. No. 14, Lucky Boy, is likewise a richly bred Scotch. The helper

No. 29, is a choice bred Cruickshank Matchless, and so we might go on analyzing the breeding of nearly every animal booked for the sale, but it is better that the reader interested do this himself and then make up his mind to attend the sale.

Sedalia Shorthorn Sale.

The dedication cattle sale in the new Live Stock Show pavilion, Missouri State Fair Grounds, being a combination Shorthorn sale held April 20, again demonstrated the fact that fine weather is not always favorable to a public sale—the preceding few days of nice weather had caused the "spring work fever" to attack every farmer within reach, and it would have been a masterful attraction that could coax them away from their work, hence the attendance was not so large as was expected or as the occasion warranted. Breeders were present from many parts of the State, and they heartily echoed the sentiment expressed by Colonel Harriman in his speech opening the sale, when he said that the stockmen and farmers of Missouri are to be congratulated upon having provided for their use so magnificent a structure as the great new show pavilion, and they are under lasting obligations to the enterprise and liberality of the State Fair Board for having furnished it. Colonel Harriman was in fine mettle and his address was an eloquent tribute to improved live stock, to good cattle, to the progressive enterprise of the men who have given to Missouri her splendid reputation among the breeders of America and to the well-known breeders who had consigned stock to this sale. He did all of the block work, and was ably assisted by Cols. C. J. Hieronymous and S. W. Kidd in the ring.

The offering was composed largely of young stuff and many of the animals were too thin in flesh, hence the average given in the summary—while not what the quality of the stock warranted—were considered good by experienced stockmen present. This sale emphatically demonstrated the fact that Sedalia is to be a public sale center for pure-bred stock—with a more favorable time and the stock more carefully fitted, the averages will rank up with the best sales in the country.

Besides the contributors and the buyers mentioned below, the following named prominent stockmen from a distance were present: Chenault Todd, Fayette, Mo.; Col. John D. Snyder, Winfield, Kans.; Messrs. Harris & McMahen, Lamme, Mo.; John Koonts, Cartage; Arthur Rhys, Cartage; R. B. Wornall, Kansas City; L. M. Monsees, Smithson; Chas. F. Wadeigh, Green Ridge; E. B. Mitchell, Clinton; R. K. Thompson, Beaman; S. W. Roberts, Pleasant Green; G. P. Grimes, Madision; T. H. Carskadon, Dalton; G. M. Bowlers, Paris; D. W. Byrne, Keytesville; H. J. Maddox, Plad; Dan Donnouhie, Appleton City; A. M. Hillas, Hughesville; Ed. Patterson, Buncombe.

The sale was under the management of Chas. R. Gentry, Sedalia, Mo.

Following is a summary of the sale:

8 bulls averaged.....\$128.12

13 females averaged.....86.50

21 head, general av.....102.40

A detailed report of the sale follows:

C. E. LEONARD & SON'S CONSIGNMENT.

1. Cow, Dr. O. L. Kerr, Independence, Mo.\$200.00

2. Cow, John Welch, Mussel Fork, Mo.100.00

3. Cow, Dr. O. L. Kerr.100.00

4. Bull, J. P. Newell, Cartage, Mo.295.00

5. Bull, W. H. Rissler, Lamotte, Mo.75.00

N. H. GENTRY'S CONSIGNMENT.

6. Bull, Henry Hanb, Whiting, Kans.\$130.00

7. Bull, Henry Shuster, Sedalia, Mo.65.00

8. John D. Crawford, Sedalia, Mo.87.50

HARRIMAN BROS. CONSIGNMENT.

9. Bull, Dr. O. L. Kerr.\$162.50

10. Dr. H. K. Givens, Fayette, Mo.110.00

JUNO K. KING'S CONSIGNMENT.

11. Cow, Walter Morey, Sedalia, Mo.\$62.50

12. Cow, Dr. O. L. Kerr.85.00

GENTRY BROS.' CONSIGNMENT.

13. Cow, Dr. O. L. Kerr.\$72.50

14. Cow, McFarland Bros., Sedalia, Mo.70.00

24. Cow, Dr. O. L. Kerr.	125.00
25. Cow, Dr. O. L. Kerr.	57.50
27. Cow, Dr. O. L. Kerr.	77.50
28. Dr. O. L. Kerr.	47.50
30. Cow, J. F. Butterworth, Sedalia, Mo.	62.50
32. Cow, Dr. O. L. Kerr.	105.00
33. Cow, W. H. Rissler.	70.00

A New Record for Shorthorns.

The pure-bred Shorthorn cow, "Florance Airdrie 6th", owned by the Nebraska Experiment Station, has just the present her milk and butter records which is a leader for cows of this breed. She produced between April 7, 1905, and April 7, 1906, 10,487 pounds milk, 413.01 pounds of butter-fat, and 481.84 pounds of butter. Her average test was 3.94, and she was with calf during the last six months of her lactation.

Florence was purchased from Mr. William Ernst, of Tecumseh, Neb., on April 20, 1903, and from that date to the present her milk and butter records are as follows:

Year	Milk	Butterfat	Butter
1903.	7537.5	358.51	418.26
1904.	7112.5	316.03	368.70
1905.	10487.0	413.01	481.84

Total 3 yrs. 25137.0 1087.55 1268.80

Average for 3 years. 8379.0 362.51 422.93

She was born June 20, 1898, being now about eight years old and in her prime. If she retains her normal condition, she will, no doubt, produce a still larger record next year. During the three years she has dropped three bull calves and is due to freshen again in July of this year.

The Square Deal Poland-Chinas.

Mr. Wm. D. Calder, owner of the Square Deal Stock Farm at Bancroft, Kans., has just added a new herd boar that ought to prove a coker. This is Calder's Chief by Garver's Choice by Kansas Chief, the boar that became famous as the head of C. M. Garver's herd at Abilene. There is not enough of Kansas Chief's blood among the Poland-China herds of the West, and we are glad to know that Mr. Calder has secured one of his best grandsons as herd-boar. Later Mr. Calder will have some litters in his pens by this young boar, and it will pay to keep an eye on them.

Mr. Calder has for sale now good young boars that ought to make money for some one. They were sired by Square Deal 36749 and out of Daisy Calder 87343, who is a daughter of Calder's Perfection 33581, a great grandson of old Chief Perfection 2d. Daisy Calder's dam was Black Beauty 73707 by Shawnee Chief 23502. That pedigree is good enough for any one. The advertising card of The Square Deal Stock Farm is on page 478.

Mall Bids at Public Sales.

It is a matter of surprise and wonder that the small breeders and farmers do not take more interest in the public sales of pure-bred hogs now being held in various parts of this and other States. Now is the time when herd-headers are needed and if the farmer finds it impossible to attend any of these sales he can always send his bid by mail. A small bid placed in the hands of a competent auctioneer or fieldman will sometimes secure a choice animal at a bargain.

One of THE KANSAS FARMER fieldmen recently carried to a sale of pure-bred hogs a limit bid of \$30 for a boar. His instructions were to use his best judgment and secure a hog worth the money. He was able, through his experience, to fill this order for \$19, for which price he secured the best boar pig in the entire offering, though many sold for double that sum or nearly so.

A competent auctioneer or a qualified fieldman is, in very many cases, better able to select good animals and to pick out the bargains than is the farmer who is less familiar with such matters. A small bid in good hands is often and practically as good as a personal bid in securing good animals at public sales.

Hebrew's Hog Sale.

One of the successful hog sales held this spring was that of J. A. Hebrew of Stockton, Kans. Mr. Hebrew is one of the substantial farmers of Rooks County. He has

Home Departments

CONDUCTED BY RUTH COWGILL.

The Heart of the Hills.

There's a wonderful country lying
Far off from the noisy town,
Where the wind flower swings,
And the song-bird sings,
And the tumbling brooks come down—
'Tis a land of light and of laughter,
Where peace all the woodland fills;
'Tis the land that lies
'Neath the summer skies
In the heart of the happy hills.

The road to that wonderful country
Leads out from the gates of care;
And the tired feet
In the dusty street
Are longing to enter there;
And a voice from that land is calling,
In the rush of a thousand rills—
"Come away, away,
To the woods to-day.
To the heart of the happy hills."

Far away in that wonderful country,
Where the skies have deepest hue,
In the shadows cool,
By the foaming pool,
We may put on strength anew;
We may drink from the magic foun-
tains
Where the wine of life distills;
And never a care
Shall find us there,
In the heart of the happy hills.

—Boston Transcript.

The Two Pictures.

I have before me two pictures, one "the Shepherdess" by Millet. She is a peasant girl watching her sheep. She stands, hooded and cloaked, her crook leaning against her while her eyes are bent upon the knitting that her hands are doing. Her whole attitude portrays anything but joy. The countenance is sad and dejected. She sees not the beauty all around her. She is probably bemoaning her hard lot. She is not typical of toil, but of drudgery. The other picture is "The Song of the Lark" by Breton. It also is a picture of a peasant girl. She has her sickle in her hand going forth to reap in the field. She is a strong, joyous country girl listening to the song of the lark. Her head is up and her whole attitude bespeaks a happy, contented spirit. This picture makes me think of work, the work that makes one happier, better, and healthier. This is not drudgery. Work is one of the greatest blessings to mankind. The men and women who have health and ability to push their work before them and see it move in order and system ought to be the happiest people on earth. Work is noble and was ordained of God. Drudgery is slaving, and work becomes such when it is irksome and one is driven to it. Housework is both healthful and pleasant if done with moderation, taking time to enjoy the beautiful things as they come along. The first picture spoken of represents the busy woman who needs to do two things at once. While she tends the sheep she must knit—but knitting may be done without keeping the eyes constantly upon it. She might see the beauty around her and enjoy God's sunshine, thanking Him for health and ability to do what she must instead of repining her hard lot. Life is indeed to a great extent what we make it, and after all, happiness does not depend so much upon circumstances. It comes from within. It is one of woman's duties and privileges to be happy and cheerful, but if she were dependent entirely upon outside circumstances it would often be a difficult of attainment.

In the routine of housework it is hard not to bury one's self in the work, to be so absorbed with it all that one is lost to everything else and half the joy of life is lost. I know there are the three meals a day to be prepared, dishes to be washed, sweeping and dusting and a thousand and one other "little things," and then there is the ever present sewing to be done. John and Mary and Jack and Jane must have clothes. But while these things are to be done let us take them up one at a time as if each were the only thing, taking time as the day glides along to enjoy everything that comes along. Like the young girl in the second picture, let us go about our work with a song in the heart and a light in the eye and be master of the situation and "not like dumb driven cattle." The only way to enjoy life is to get pleasure every hour as we pass along. We go this way but once. Like the busy bee, let us take the sweets as we come to them from the thistle blossom as well as from the rose. Many make the mistake of living in the future thinking when the children are grown up they will have time for this or that, or when the mortgage is paid off, or the quarter section is paid for they will take more time to read or enjoy some coveted pleasure. That is a mistake.

Every year brings its duties. It is only a mirage that allures. When the children are around you with their innocent prattle and unaffected love is one of the sweetest times of life. Think not of the bother and care. Enjoy them while you may. Be to them a companion and chum, for the time is fast fleeting when you may enjoy this pleasure, and you can only look back with regret. A contented, satisfied mind is necessary to happiness in one's work. President Roosevelt was buried in the midst of a pile of work when a friend happening in asked him how he could stand such a strain. He answered with a look that showed that he meant it, "Oh, I like my job." That is the secret of his wonderful ability to accomplish so much and his endurance. I think as a rule the country women are the most contented and happy of any, and can say with zest and earnestness, "I like my job." Their environments are such as tend to make them happy. They are away from the hurry and rush of city life and escape many of the complexities of living that come to women who live in the city. They may live the simple life in which is true enjoyment. They can get so close to nature, which is so restful, and to nature's God, which is peace.

What is it then that turns toil into drudgery? It is not hardship. It is not because it is routine and must be repeated over again and again, nor has physical inability anything to do with it. It is because it lacks soul, interest, thought, and love. If our work is drudgery it is because we make it so.

Care of the Teeth.

"A pearl in the mouth is worth two on the neck," is an up-to-date adage which women would do well to ponder over. A woman of many charms will often fail of impression if the teeth are not delicately clean and white.

There are many factors which go to determine the soundness of one's teeth, but none more potent than that of use. Good, vigorous action is necessary in order that a supply of blood may be called to the teeth to nourish them. Give a muscle no exercise and the veriest novice knows it will get soft. Give the teeth no work and they become chalky and an easy prey to decay.

Too much cooking of food and the use of soft, prepared dishes have had much to do with getting people out of the habit of chewing. Those who live on coarse foods requiring thorough mastication have the perfect teeth of animals, white and hard and even. The blood supply is perfect on account of the stimulation given by thorough exercise of the jaws.

The higher the civilization, the worse the teeth. For not only do people eat food which is too greatly refined to require chewing, or soft and mushy from over preparation, but they also eat sweets and condiments, and worst of all, perhaps, they overeat.

"The use of sugar," said a dentist whose reputation is world wide, "is bad in two ways. It not only promotes fermentation in the mouth, but it creates a false taste, which will have to be satisfied with other things equally detrimental and unneeded. And they who eat more food than necessary never can have a naturally cleansed mouth, for the saliva is provided to dissolve perfectly only the food the body needs.

"For the many who do not or can not regulate their habits so that their teeth are kept naturally in good condition, there are many simple helps which do much to counteract any bad tendencies. Cleanse them thoroughly with a plain preparation of chalk and orris root, using tepid water and a stiff brush. This should be done after every meal. At least once a day examine them thoroughly with the aid of a mirror to make sure that they are properly freed from all food particles. When you are having dentistry done, be sure to see that a space is left between the teeth sufficient to allow you to pass dental floss (common sewing silk will do) back and forth to dislodge any food that may get in. A good dentist should see to this, and also that there are no jagged edges to break and cut the silk and prevent its free movement. But the mouths of nine out of every ten people who have had extensive work done show an opposite condition of affairs.

"The necessity for clean teeth at night should be especially borne in



Only \$38 THE GREATEST BARGAIN ON EARTH

KEEP OUR COMPETITORS AWAKE NIGHTS TO TELL HOW WE DO IT.



HAPGOOD PLOW COMPANY, 804 FRONT ST., ALTON, ILL.

mind. This will prevent the growth and development of micro-organisms in the mouth. These are generated most rapidly during sleep, while the person is quiescent. They cause putrefaction and decay of the teeth.

"When teeth require filling they are often acutely sensitive on account of high acidity of the saliva, and very great pain results from any work done on them. This may be largely obviated by the use of an alkaline wash in the mouth for two or three weeks previous to a visit to the dentist. A tiny pinch of common baking soda, bought at a druggist's to insure purity, is dissolved in a quarter of a glass of water and used to rinse the mouth thoroughly night and morning."—New York Tribune.

Laundry Hints.

To Bleach Table Linen.—Javelle water, in peach time of all others, is a necessity. It will take out the old stains in table linen that were overlooked when the clothes were sent to the laundress. Besides this, it will whiten the handkerchiefs yellowed by perspiring faces and hands. To make it, dissolve half a pound of sal-soda in a pint of boiling water. In another dish dissolve a quarter of a pound of chloride of lime in a quart of boiling water. Pour the two together, stir, settle, and turn off the clear liquid, leaving the settings. Keep in a tightly corked jug in a dark closet.—New York Sun.

To Clean Lace.—Baste the lace to a piece of white flannel with short stitches, and as near the edge as possible; then baste across the piece several times each way, and wind the strip of flannel around a smooth glass bottle, stand the bottle or lay it in a warm suds of rain water and some good washing powder, and dip it up and down and about until it looks perfectly clean; then since in warm, clear water and put it out to dry in the sun. I have seen some beautiful Battenburg collars and muslin ties with lace edges washed thus.

To remove a vinegar, wine, or a fruit stain from a white linen cloth, the following will be found effectual: Hold the stained parts in boiling milk and the stains will be found to quickly disappear.

If a spoonful of borax is put into the last water in which white clothes are rinsed, it will whiten them very much. The borax should be dissolved in a little hot water before it is added to the rinsing water.

In washing black muslins and lawns a tablespoonful of turpentine should be

BARGAINS	Chinaware Sets, ... \$2.80 to \$12
28 Pieces Table Cutlery, good plate,	\$2.50
Sure-Cutter Shears and Scissors, 2 pairs,	50 cts
Wade & Butcher Razor Strap and Bone,	\$1.00
\$1.00 box Medicated Toilet Soap,	35 cts
Headquarter for Watches,	75 cts. to \$18.00
Black Gloss Buggy Paint, gallon,	\$1.50
Gasoline Stoves, 2 burners,	\$2.75
Poultry and Stock Foods, packet,	15 cts
Cigars, per 100,	\$1.50 to \$2.50
Washing Machines, none better,	\$3.25
Send for Catalogue of many snap bargains.	
Agents wanted. New Process Mfg. Co., Dept. 50, Lincoln, Kans.	

You Will Prosper in the great, growing Southwest

If you purchase a farm in the Southwest now, while the land is cheap, you will soon see grow up around you a community of prosperous, energetic men, who like yourself, have seen the possibilities of the Southwest, and have taken advantage of them. This very condition, which is rapidly forming all over the Southwest, is making the value of land increase rapidly, to the certain profit of those who own it.

There are more and better opportunities for making money—for home building, in the Southwest—along the line of the Missouri, Kansas & Texas Railway to-day, than anywhere else. You have only to get on the ground to prove this. If you are in any way interested in the Southwest, write to-day for a copy of my new paper "The Coming Country."

Go Southwest Now

Take advantage of the homeseekers' rates, April 17th and May 1st and 15th, and go and see the country for yourself. On above dates most lines will sell both one-way and round trip tickets at exceptionally low rates. If your nearest railroad agent can not give you the rates, write me for particulars.

W. S. ST. GEORGE
General Passenger Agt., M. K. & T. Ry
580 Wainwright Building,
St. Louis, Mo.

Tickets on sale everywhere, via



"SOUTHWEST"

FIFTH TERM JONES' NATIONAL SCHOOL OF Auctioneering and Oratory Davenport, Iowa

6th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write Carey M. Jones, President.

added to each pailful of rinsing water. Use gum arabic water instead of starch for black cottons. This gum arabic water is used to freshen muslins of all colors which have become limp. Sprinkle the gown and turn it wrong side out while drying. Sprinkle with clear water and iron on the wrong side.

A tablespoonful of sal-soda, over which boiling water is poured, is recommended for taking stains off coffee pots. With this treatment no boiling is necessary.

Scraps of soap too small to be used any other way may be saved in a can and cut up and used in the boiling water to boil the clothes.

The state of the irons has much to do with the success of the ironing. When the irons show a tendency toward rusting or black specks, it is time that they are washed in soap suds. Dry them carefully after this washing. Sandpaper is a good thing to have at hand when irons become sticky with starch. Rubbing an iron once or twice across the sandpaper will render it smooth again. If the sandpaper is lacking dry salt on a piece of paper will answer the same purpose. Flatirons should not be left where the steam of cooking can reach them, as that causes them to rust. Always set the irons away on end rather than flat on the shelf. Those which have once been allowed to grow red hot never retain the heat so well afterward.

The Young Folks

Robin.

Rolling Robin is here again, What does he care for the April rain? Care for it? Glad of it! Doesn't he know? That the April rain carries off the snow, And coaxes the leaves to shadow his nest, And washes his pretty red Easter vest, And makes the juice of the cherry sweet, For his hungry little robins to eat? "Ha! ha! ha!" hear the jolly bird laugh, "That isn't the best of the story by half!"

Gentleman Robin, he walks up and down, In orange-tawny and black and brown, Though his eye is so round and his steps so firm, He can always stoop to pick up a worm, With a twist of his head, and a start and a hop. To his robin-wife in the peach-tree top, Chirping his heart out, he calls, "My dear, You don't earn your living! come here! come here!" Ha! ha! ha! Life is lovely and sweet; But what would it be if we'd nothing to eat?"

Robin, Sir Robin, gay red-vested knight, Now you have come to us, summer's in sight. You never dream of the wonders you bring, Visions that follow the flash of your wing. How all the beautiful hy-and-hy Around you and after you seem to fly! Sling on or eat on, as please your mind! Well have you earned every morsel you find. "Aye, ha! ha! ha!" whistled Robin; "My dear, Let us all take our own choice of good cheer."

—Lucy Larcom.

Fleetfoot; the Autobiography of a Pony.

CHAPTER VII.—THE SCHOOLHOUSE BY THE ROAD.

It would be hard to describe the children's delight and pride that September morning, the opening day of school, when I hitched to a rubber-tired buggy, dashed up in front of the little red building with its wide open doors facing the roadside. We were greeted by various kinds of shouts from the large group of children which had congregated in the tidy school-yard. A chorus acclaimed, "Hurrah for the pony! He's a fine racer!" and when Marcella alighted with books and dinner-basket, as many boys as could hang on to any part of the buggy clamored for a ride in our gorgeous outfit.

We started down a lane which wound in and out among tall hedge-trees. Although Lyall was considered a fluent talker at home he now made only a feeble effort to answer the deluge of questions which poured over him. "What is the pony's name? Just Pony! Why didn't you call him Beauty or Quick-step? Can he pace? Who broke him? Does he belong to you or Marcella? Why don't you make him go faster when you know he can? Are you going to buy another like this one? Will you sell this one?" These are only a few of the queries of which I was the subject and I do not know how many times the list would have been doubled had there not come all at once the clear tinkle of a bell, at which signal I was immediately turned in my course and

urged to use my best pace in the direction of the house of knowledge. As I bounded along I could hear the excited conversation of the lads behind me. It seemed that in the panic a couple of the smaller ones were crowded out and fell by the wayside. The others, not having the love-your-neighbor spirit in their hearts just then, did not lose any time in picking them up, but continued to plead with me for a more rapid gait.

"The teacher looks cross and she'll give us the rod before she even knows our names," remarked one little fellow breathlessly, and another answered him quickly, "You bet she won't whip me when she hears my name. My pa's director."

"That don't make any difference," chimed in a third; "she told Uncle Glace that she wasn't goin' to have any picks."

"Did she mean tooth-picks?" was the surprised query from Lyall.

"Oh, no, it's favorites. Director's kids and things like that."

Further comment was prevented for the time being for we were now in the school-yard not very far from the yawning doors, through which filed a decorous row of small girls with short dresses and long braids.

Marcella was among them, and I noticed that as she passed she threw an uneasy glance in our direction. From around the corner at full speed came a dozen or more lads with arms swinging wildly and disheveled heads pushed forward. As great as was their haste, one little chap, still indignant from having been denied a ride, took the opportunity to whisper spitefully to Lyall and his companions, "You'll catch it, smart Alecks, you will!"

Frénzied by this cruel prophecy, the guilty ones flung my lines and hitching strap to the ground and with a few frantic leaps landed on the topmost steps. To their consternation they suddenly encountered the new teacher in the doorway, but instead of fiercely upbraiding them as they had expected, she smiled and put out a detaining hand.

"It isn't quite nine o'clock yet," she said, "and I think you will have time to unhitch the pony. It would be a good plan to take the harness off, too, and pump that bucket full of water at the well. The little thing will need a drink. How very warm it looks!"

One of the boys answered a husky, "Yes, ma'am," and Lyall was so much relieved that I don't believe he knew what he said when he exclaimed, "Thank you very much." Those two then took me in charge and while they relieved me of the harness, and placing it in the buggy, backed the vehicle under the shade of a near-by tree, they recovered their self-possession almost to the extent of bravado. Neither one, according to his own statement, had been in the least afraid of the new teacher but had pretended to be in order to frighten each other and the "kids" (the euphonious name by which the younger pupils were sometimes known).

I was set free and walking around the yard in less time than it takes to tell it, and now while Lyall is pumping a drink for me we might take a glance at his "chum."

His name was Archibald Lamb, but his brilliant schoolmates chose to designate him as "the bald lamb."

In appearance as well as in name he was lamblike, being pale-faced, mild-eyed and innocent looking, but here the resemblance ended, for he was strong and wiry and was far to the front in all the energetic sports in which the boys engaged. Since Archibald was captain and leader of every game, Lyall was obliged to take second place, but the latter was never envious or resentful, for he was very proud of his chum who was a year older than himself.

On this particular day which I have in mind, I followed Lyall and Archibald to the schoolhouse door, and as they took their places in the second seat I drew back in such a way as to see all that was going on, without myself attracting any notice.

I am not sure that I was not biased in the new teacher's favor, but I believe to this hour that she was a very lovely person. I can not tell just how it was but she showed such interest and confidence in us all that we were willing to learn and eager to please.

On this first day of school she went from one desk to another asking in a clear, soft voice the names and ages of her pupils. When she came to Lyall's chum a suppressed tittering could be heard distinctly. A look silenced the hilarious band, and when the room was so still you could hear the buzzing of a belated fly, the teacher said very kindly to Archibald, who was

LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,** New York

California

For a change why not make that visit to California early in the season? You'll enjoy it. Visit Grand Canyon enroute. Stop over and see the Petrified Forest. Ride through the country of fruits and flowers. Attractive and inexpensive variable route tours within the means of almost every one. About one-half the usual rate. Long limit and liberal stop-over privileges. I'll help you plan a trip. Tickets on sale April 25 to May 5, inclusive.

The Santa Fe is the line of fast trains, modern and comfortable chair cars and luxurious Pullmans, Harvey meals, rock-balasted track, block signals.



N. B.—Members of the Mystic Shrine and delegates to National Congress of Mothers, both to be held in Los Angeles between May 7 and 11, should take advantage of this offer Descriptive folder free.

T. L. KING, Agent, Topeka, Kansas

Cheap Excursions Southwest

Low Rates each first and third Tuesday, monthly

Round-trip tickets sold from nearly all Rock Island points in the North and Central West to practically all points Southwest.

Rate about half the regular fare.

Pluck means sure success in the Southwest. An illustrated book or two will help you to a better acquaintance with the country. I'll be glad to send them on request. State the section which most interests you.



A. M. FULLER, C. P. A.

TOPEKA, KANSAS

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

by this time quite rosy in the face, "Write your name, dear, and your age."

He told the youngsters at recess that if it had not been for their mockery he would not have had the distinction of being the first one called "dear" by the new teacher, wherupon they twitted him as the first "dear" and the only "lamb" in the school.

That day dragged on to its close as did many others which followed, and as far as any outward sign revealed, they were all passed in much the same manner. But, in truth, great changes were going on in the young minds, new ideas were born, noble ambitions took root and flourished under the guiding hand of the young school-mistress who was not the "new teacher" any more, but the loved and trusted friend of all the pupils, without even the exception of the proverbial "bad boy."

The Little Ones

On Arbor Day.

"I wonder," said the little nut,
"What I am going to be!"
The sunshine whispered overhead,
"You'd better grow and see!"
He sent two tender leaflets up
Amidst the crowding grass.
"It's stuffy underground!" he cried.
"Please won't you let me pass?"
Then Robbie saw him standing there
And carried him away.
"I've found the dearest thing," said he;
"My tree for Arbor Day!
He'll need a long, long time to grow,
He's very small, you see;
But by the time that I'm a man
He'll make a splendid tree!
Perhaps then I'll be President—
I wonder what I'll be!"
The sunshine whispered low to both,
"You'd better grow and see!"
—Hannah G. Farnald, in *Youth's Companion*.

An Essay on Girls.

WRITTEN BY A GIRL TEN YEARS OLD.

Girls always want to have their own way, and sometimes they tease until they get it, but most of them get a whipping for teasing. Other times little girls have some little toys, and some other little girls come to play with them. They want to have all the toys themselves. Girls always want to play and when their mothers want them to come and wash the dishes or dry them or take the baby, they say "just in a minute," and when the minute is up, they say "just in a minute," till their mothers have to make them come. When mamma wants her girl to come and take the baby till she puts the bread in the oven and hunts the eggs, the little girl slips around and puts the baby in her papa's arms and slips out to play. Girls throw snowballs, wash each other's faces with snow and have a good time, but when mammas say "Come and wash your hands and face with soap and water," it's "O, I'm clean enough. I washed my hands and face with snow." But mammas say "The snow is not clean." But little girls say "O, let me go this time. I don't like to wash before every meal, and sometimes wash two or three times extra." But mammas say "That only keeps you clean." But girls say "Let me go dirty one day." But mammas say "What if some one comes and sees your dirty hands and face?" "O, I could run in the room and wash myself, and when I come out I would be clean." Girls have to bring the cows in and sometimes milk them. They have to drive the chickens out of the garden and hoe the tomatoes and all such work. —ETHEL G. CATHCART.

Rooks County.

Marriage Maxims.

Never marry except for love.
Never taunt with a past mistake.
Never allow a request to be repeated.
Never meet without a loving welcome.
Never both be angry at the same time.
Never forget to let self-denial be the daily aim and practice of each.
Never let the sun go down upon any anger or grievance.
Never neglect one another; rather neglect the whole world besides.
Never make a remark at the expense of the other—it is meanness.
Never be "stubborn," but let each strive to yield oftenest to the wishes of the other.
Never part for a day without loving words to think of during absence.
Never find fault unless it is perfectly certain that a fault has been committed, and always speak lovingly.
Never let any fault you have committed go by until you have frankly confessed it and asked forgiveness.
Never forget that the nearest approach to perfect domestic happiness on earth is the cultivation, on both sides, of absolute unselfishness.

If you will eat more

Uneeda Biscuit

you can do more work, enabling you to earn more money, so that you can buy more

Uneeda Biscuit

do more work and earn still more money.

5¢

NATIONAL BISCUIT COMPANY

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Foothill Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County (1902).
Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russel, Kans.
The Sunflower Club, Perry, Jefferson County (1905).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

FAMOUS WOMEN.

Hannah More.

Roll-call—Quotations from Hannah More.

- I. Her early life.
- II. The philanthropist.
- III. The literary woman.
- IV. Female education.

I. Hannah More's early life embraced a great deal. Before she was thirty she had accomplished more than ordinary people have at fifty or perhaps it would not be extravagant to say seventy-five. She studied Latin when eight years old and before she was eighteen she had attracted attention by her verse. The first thirty years of her life were the most brilliant, but not the most useful. She was talented, beautiful, and brilliant, surrounded by a host of famous and gifted friends.

II. Although she was petted and flattered during her early life she was not spoiled. After she was about forty she almost abandoned fashionable life. She found it frivolous, vain, and even dull. She turned her mind and heart to the poor and the rest of her life was spent for their betterment. She wrote for the poor, raised money for them, instituted schools and churches for them—in short spent her life for them.

III. Hannah More was a writer of verse but her fame rests on her writ-



A CONCRETE SILO
Gedney Farms, White Plains, N. Y.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

TO CALIFORNIA AND RETURN

San Francisco or Los Angeles. Tickets on sale April 25th to May 5th, 1906.

\$50.00

FOR THE ROUND TRIP

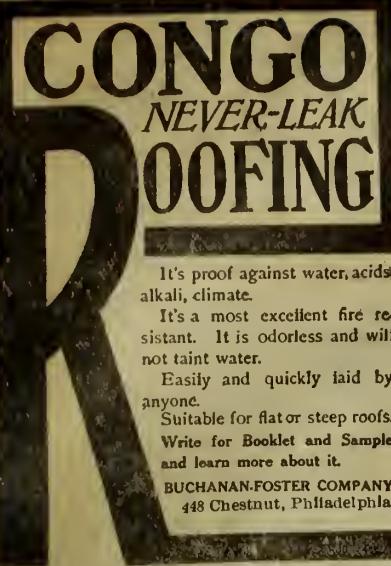
To accommodate delegates and others to Meeting of the Mystic Shrine this remarkably low round trip rate to Los Angeles has been granted by the

UNION PACIFIC

SHORT LINE FAST TRAINS NO DELAYS

Be sure your tickets read over this line.
Inquire of

F. A. LEWIS, City Ticket Agent or
J. C. FULTON, Depot Agent



AGENTS WANTED Sell \$1 bottle Sarsaparilla for 35¢, best seller; 200 percent profit. Write today for terms. M. R. Green, 115 Lake St., Chicago.

ANYONE WISHING **UNITARIAN PUBLICATIONS** SENT FREE, may address Mrs. F. O. Leland, Concord, Mass.

ABSOLUTELY FREE to any article you select from our handsome illustrated catalog of Household Articles. Write for catalog and select gift which we will send postpaid. DUDLEY PURCHASING CO., P. O. Box 99, New York.

WEED Cutter for hulled corn, adjustable long knives with harrow attachment, seat and draft rod all complete \$6. Free catalogue of snap bargain prices on many other goods. New Process Manufacturing Co., Lincoln, Kansas.

FREE BOOK Tells how to build Walks, Floors, troughs, cisterns, roofs, tanks, etc. Cheap, sanitary, everlasting. Given to any person sending 50 cents for a year's subscription to our practical paper. **ON CEMENT** THE CEMENT ERA, 207 Tolsma Bldg., Detroit, Mich.

A Harvest of Dollars The Ideal place for profitable investments is in the Ozarks. Write to-day. The Ozark Mutual Town and Land Co., 527 Victoria Building, St. Louis, Mo.

FOR SALE At a bargain, one Davis No. 3 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

More Money Made as Local Agent FOR FARMERS FIVE YEAR ACCOUNT-BOOKS Also Five Year Diaries. Address Chas. H. Allen Co., Rochester, N. Y.

WANTED! An agent in every town to sell our fire-proof Safes. Big demand. Big profits. No practical experience needed. Write for particulars.

Alpine Safe Co., Ninth and Freeman, CINCINNATI.

Send for 84 Page Catalog

Buggies \$28.00
Harness \$5.60

Erhardt Carriage and Harness Co., Atchison, Kansas

Death of Floral Lawn Cause, Smothered by Dandelions

The dandelion pest has had its day. For one dollar you can get an instrument that can be used by women and children as well as men that will pull dandelions and other noxious weeds at the rate of one thousand an hour, and leave not a drop of dirt nor a visible tear in the sod. No stooping nor bending and is a pleasure not a task to operate it; delivers automatically the weeds pulled, and your hands are not soiled, nor your back tired, no grinding nor bumping around to do your work. Pull any dandelion or weed when tap root does not exceed 16 inches in length. Send one dollar and we will deliver free at your door.

The Standard Incubator Co. PONCA, NEBRASKA

Ings as a moralist and educator. Her "Search After Happiness" went through six editions before she was thirty. Something about her as a writer with selections from some of her productions will prove very interesting.

IV. Under this subject is a chance for some one to express her views on the education of girls. Shall she be educated so as to be able to support herself or to be best fitted to perform the duties of wife and mother? Shall she be educated for usefulness or for admiration? Hannah More's ideas on this subject would be of interest.

Some New Pictures.

The new French collection recently added to the Traveling Art gallery of the State federation has been in use since February 1, and is by far the most popular, as it is the best understood of all the collections. It contains 78 pictures and in these one can trace the progress of French art from its early Italianism through its different stages—classic, romantic, realistic, etc., down to modern times. There are six pictures by Millet, four by Corot, Bonheur, Breton, Bouguereau, and Dagnan Bouivet, two especially fine ones by Bonnat, Jerome, Meissonier, Schefer, and others.

It is a good idea for clubs wishing to secure collections for study or exhibition purposes to order now for next year, as the routes can be arranged so as to make express charges light when this is done.

The Grange

"For the good of our Order, our Country and Mankind." Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed. News from Kansas Granges is especially solicited.

NATIONAL GRANGE.
Master.....N. J. Bachelder, Concord, N. H.
Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary ...C. M. Freeman, Tippecanoe City, Ohio
KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan
Overseer.....A. P. Heardon, McLouth
Lecturer.....Ole Hilbert, Olathe
Stewart.....R. C. Post, Spring Hill
Assistant Stewart.....Frank Wizwell Ochiltree
Chaplain.....Mrs. M. J. Ramage, Arkansas City
Treasurer.....Wm. Henry, Olathe
Secretary.....George Black, Olathe
Gatekeeper.....J. H. Smith, Lone Elm
Ceres.....Mrs. M. L. Allison, Lyndon
Pomona.....Mrs. S. M. Phinney, McLouth
Flora.....Mrs. S. J. Lovett, Larne
L. A. S.....Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.
O. F. Whitney, Chairman.....Topeka, Station A
E. W. WestgateManhattan
George Black, Secretary.....Olathe
Henry Rhoades.....Gardner
J. C. Lovett.....Bucyrus

STATE ORGANIZER.
W. B. Obryhim.....Overbrook

Shawnee County Pomona Grange. Shawnee County Pomona Grange was called to order at Berryton Hall at 2 p. m. by Worthy Master Sims. The following newly elected officers were then installed: Master, H. H. Wallace; overseer, W. L. Staples; lecturer, O. F. Whitney; secretary, L. Mabel Waters.

Dr. N. J. Taylor offered the following resolution: "That in our township affairs party politics be ignored." A motion was then carried, that this grange recommend the elimination of party caucuses. Brother Whitney introduced the subject of the Boys' Corn-Growing Contest and the prizes that have been offered. He also asked that a representative of each grange state at the next Pomona grange meeting what is most needed in legislation.

The secretary was then instructed to find out the number of members wishing to take the fifth degree.

On motion an organization committee consisting of one from each grange was appointed as follows: Brothers, J. S. Longshore, Lund, Firestone, Polion, Boyles, Brobst.

The Worthy Master stated that the next meeting will be held on the first Tuesday in June, at Indian Creek.

L. MABEL WATERS, Secretary.

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar, also meals à la carte. Ask for tickets via the Nickel Plate road. Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

WORKING WOMEN

Their Hard Struggle Made Easier—Interesting Statements by a Young Lady in Boston and One in Nashville, Tenn.



All women work; some in their homes, some in church, and some in the whirl of society. And in stores, mills and shops tens of thousands are on the never-ceasing treadmill, earning their daily bread.

All are subject to the same physical laws; all suffer alike from the same physical disturbance, and the nature of their duties, in many cases, quickly drift them into the horrors of all kinds of female complaints, tumors, ulceration, falling and displacements or perhaps irregularity or suppression, causing backache, nervousness, irritability and lassitude.

They especially require an invigorating, sustaining medicine which will strengthen the female organism and enable them to bear easily the fatigues of the day, to sleep well at night, and to rise refreshed and cheerful.

How distressing to see a woman struggling to earn a livelihood or perform her household duties when her back and head are aching, she is so tired she can hardly drag about or stand up, and every movement causes pain, the origin of which is due to some derangement of the female organism.

Miss F. Orser, of 14 Warrenton Street, Boston, tells women how to avoid such suffering; she writes:

Dear Mrs. Pinkham:

"I suffered misery for several years with female irregularities. My back ached; I had bearing-down pains, and frequent headaches;

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fall.

I could not sleep and could hardly drag around. I consulted two physicians without relief, and as a last resort, I tried Lydia E. Pinkham's Vegetable Compound, and to my surprise, every ache and pain left me. I gained ten pounds and am in perfect health."

Miss Pearl Ackers, of 327 North Summer Street, Nashville, Tenn., writes:

Dear Mrs. Pinkham:

"I suffered with painful periods, severe backache, bearing-down pains, pains across the abdomen; was very nervous and irritable, and my trouble grew worse every month.

"My physician failed to help me and I decided to try Lydia E. Pinkham's Vegetable Compound. I soon found it was doing me good. All my pains and aches disappeared, and I no longer fear my monthly periods."

Lydia E. Pinkham's Vegetable Compound is the unfailing cure for all these troubles. It strengthens the proper muscles, and displacement with all its horrors will no more crush you.

Backache, dizziness, fainting, bearing-down pains, disordered stomach, moodiness, dislike of friends and society—all symptoms of the one cause—will be quickly dispelled, and it will make you strong and well.

You can tell the story of your sufferings to a woman, and receive helpful advice free of cost. Address Mrs. Pinkham, Lynn, Mass. The present Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham and for twenty-five years she has, under her direction and since her decease, been advising sick women free of charge.

Dempster Mill Mfg. Co.

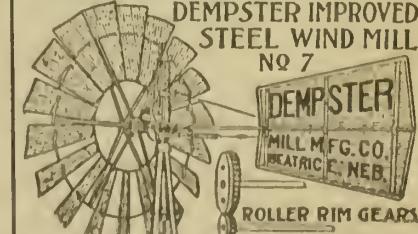
Manufacturers of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

"Dempster Gasoline Engines 2 to 20 H. P.—2 and 4 cycle Horizontal or Vertical—for any duty."

Western Made
and
Well Made

Factory, BEATRICE, NEB.
Branches—KANSAS CITY, Mo., Omaha,
Neb., Sioux Falls, South Dakota.



ROLLER RIM GEARS

THEY STOP THE
NOISE AND LESSEN THE WEAR
LATEST, STRONGEST, BEST
FACTORY, BEATRICE, NEB.

FOR SALE THE UNCLE SAM OIL-GAS BURNER Asphalt, Gasoline for good roads and streets; crude oil for fuel, lubricating, or painting; gas, kerosene and water white kerosene of high-grade. All anti-trust independent products by barrel or carload.

W. F. RIGHTMIRE, - 216 The Drive, Topeka, Kansas

Miscellany

Coburn on Crop Prospects.

On last Saturday the Kansas State Board of Agriculture issued a report based on a careful canvass of the growing winter wheat situation in practically every neighborhood, as returned by the wheat-growers themselves after critical examination of their fields on Wednesday, April 18.

Last year's winter wheat area was 5,835,237 acres; in December the growers reported the sowing for this year's crop as probably somewhat larger, and approximating 5,900,000 acres. Of this it is now reported that nearly 10 per cent has been plowed up or its wheat estimated as of no value. The condition of the remainder averages for the State 89.5 per cent, as against the State's averages of 95.4 in 1905; 83.5 in 1904; 97.8 in 1903; and 74 in 1902, at about the same dates. Last December the general average for the State's growing wheat was 80.4. This remaining 5,810,000 acres itself constitutes a mighty field of wheat, and the general recent rains closely following previous snows are strongly encouraging to its vigor and development.

Responding to the query "Are present soil conditions favorable for vigorous growth?" the replies for every county are almost without a single exception "Yes!" The wheat is uniformly backward and small for the time of year, but in the main of good color and thrifty. Seventeen counties report average conditions of 100 or better, and 47 report conditions ranging between 90 and 100, which makes 64 counties with conditions of 90 or above. Twenty-eight have a range between 80 and 90. The highest reported for any one county is 107 in Harper, and the better prospects are invariably found in the eastern half of the State; 23 of the 33 counties in the eastern quarter report not an acre to be plowed up. No injury from insects is suggested by even one reporter. Considerable areas in some of the more prominent wheat-producing counties have been plowed up or abandoned, due principally to lack of seasonable moisture and to winds blowing the soil from the wheat's roots. Notably does this apply to a block of the State's area 80 miles in width, measuring westward from the northeastern corner of Phillips County and extending southward 100 miles from the same point, embracing the 12 counties of Phillips, Norton, Decatur, Sheridan, Graham, Rooks, Ellis, Trego, Gove, Lane, Ness, and Rush. Localities here and there in other counties were similarly affected, especially in Hodgeman, Osborne, and Stafford, and in lesser degree in Russell, Lincoln, Saline, Ellsworth, Barton, Rice, Edwards, and Pawnee. The area of wheat in the counties named aggregated 2,413,464 acres, or over 40 per cent of the total area sown last fall for the State, and of this 20 per cent has been abandoned or plowed up. In the majority of these counties the general circumstances last fall were not propitious for sowing, germination, and growth, and this situation, with later unfavorable developments, was not materially improved this spring until too late. While among these are also reported the less encouraging prospects, their growing wheat is rapidly responding to the present excellent conditions of soil and weather, although much is late and small and in many fields of thin stand.

The late, cool, wet spring has delayed all spring work and has retarded, or in many instances discouraged the sowing of oats, and hence a somewhat larger acreage in corn is expected. This is true especially in the main corn-growing counties in the eastern third of the State, and likely much of the plowed-up wheat fields, especially in the block of twelve wheat counties before referred to, will also be devoted to corn.

The table below shows by counties the probable area of winter wheat sown in each last fall, the per cent estimated plowed up, and the per cent of present condition (based on 100) for the remainder:

Counties	Probable acreage	Plowed up mahrage	Condition of	Condition		
				per cent.	per cent.	per cent.
Allen	20,153	0	95			
Anderson	9,295	0	98			
Atchison	24,212	0	95			
Barber	67,665	0	94			
Barton	273,289	8	81			
Bourbon	10,279	0	100			
Brown	30,072	0	100			
Butler	13,913	0	98			
Chase	4,905	0	97			
C. Atchison	4,024	1	90			
C. Cherokee	27,557	13	80			
Cheyenne	15,290	10	80			
City	14,000	1	98			

Clay	62,897	0	96	"slurry" which, when mixed into the proper proportions, is passed into the kiln and heated to a state of insipient fusion so that complete chemical action between the different ingredients may take place. The kilns used nowadays are made of boiler iron and vary from 60 to 135 feet in length. Inside of the boiler iron is a lining about 12 inches thick composed of a peculiar kind of fire clay. The kilns are placed in an almost horizontal position and give a rotary motion which helps the material fed in at one end gradually to work through the kiln and out the other end. For this reason the kilns are often called "rotaries."		
Cloud	80,807	0	97			
Coffey	16,408	1	103			
Comanche	22,858	6	93			
Cowley	68,716	0	95			
Crawford	25,886	5	85			
Decatur	69,219	32	70			
Dickinson	103,570	1	98			
Doniphan	23,820	0	100			
Douglas	26,530	0	100			
Edwards	117,581	8	89			
Elk	7,982	0	95			
Ellis	166,594	40	63			
Ellsworth	124,527	6	76			
Finney	9,305	20	85			
Ford	94,627	5	90			
Franklin	6,847	0	92			
Geary	18,484	2	93			
Gove	32,596	10	85			
Graham	62,991	37	70			
Grant	85	0	85			
Gray	23,762	25	75			
Greeley	98	0	100			
Greenwood	4,801	0	90			
Hamilton	255	0	100			
Harper	158,806	1	107			
Harvey	76,727	6	100			
Haskell	4,962	15	80			
Hodgeman	48,514	20	73			
Jackson	5,487	0	100			
Jefferson	17,219	0	100			
Jewell	41,070	6	95			
Johnson	29,513	0	98			
Kearny	771	10	85			
Kingman	123,266	1	97			
Kiowa	72,651	4	95			
Labette	31,232	5	86			
Lane	54,319	22	65			
Leavenworth	33,578	0	94			
Lincoln	96,666	6	86			
Linn	9,061	0	94			
Logan	20,406	1	95			
Lyon	12,586	0	100			
Marion	75,382	2	95			
Marshall	36,802	2	95			
McPherson	171,728	4	93			
Meade	29,023	5	82			
Miami	17,013	2	97			
Mitchell	107,074	1	93			
Montgomery	36,879	2	96			
Morris	5,810	0	95			
Morton	55	25	90			
Nemaha	6,208	0	100			
Neosho	22,678	0	99			
Ness	115,540	22	70			
Norton	47,699	30	85			
Osage	11,517	0	93			
Osborne	102,966	13	81			
Ottawa	94,860	2	89			
Pawnee	193,091	5	86			
Phillips	68,560	16	78			
Pottawatomie	8,437	0	98			
Pratt	171,213	3	96			
Rawlins	82,085	4	84			
Reno	222,458	1	91			
Republic	27,846	1	83			
Rice	158,459	7	87			
Riley	9,390	1	92			
Rooks	107,439	32	76			
Rush	188,250	46	77			
Russell	140,534	9	82			
Saline	107,611	8	85			
Scott	14,925	2	93			
Sedgwick	152,546	0	95			
Seward	3,270	37	80			
Shawnee	6,679	0	91			
Sheridan	57,883	40	65			
Sherman	5,736	0	100			
Smith	64,695	3	92			
Stafford	201,197	12	86			
Stanton	223	25	85			
Stevens	837	25	85			
Sumner	265,614	1	100			
Thomas	63,647	7	82			
Trego	70,990	45	65			
Wabaunsee	11,117	0	98			
Wallace	529	5	100			
Washington	47,452	0	100			
Wichita	11,908	5	90			
Wilson	18,248	2	88			
Woodson	5,745	1	94			
Wyandotte	9,047	0	98			

Portland Cement in Kansas.

BY PROF. ERASMUS HAWORTH, KANSAS STATE UNIVERSITY.

The first Portland cement plant in Kansas was built at Iola by the Iola Portland Cement Company and began operations in 1900; the second one was built at Iola by the Kansas Portland Cement Company and began operations in 1904; the third was built at Neodesha by the Indian Portland Cement Company and began operations in 1905; the fourth was built at Independence by the Western States Portland Cement Company and also began operations in 1905; the fifth one is now building at Table Mound, a few miles northwest of Independence, and will be owned by the Kansas Portland Cement Company. The first two plants have had their capacity enlarged since first built, which corresponds to building new plants. When the Table Mound plant is completed, the total capacity of the five plants will aggregate about 13 thousand barrels per day.

Portland cement is essentially a silicate and aluminate of lime, although small quantities of iron and other elements are always present. It is made from limestone and shale. In speaking of these materials as found in Southeast Kansas one might say that Portland cement is made of ordinary limestone and shale. This is not true in general. Limestone frequently carries so much magnesium carbonate that it would be worthless for cement production and shale generally carries so much magnesia that it likewise would be worthless. But Kansas is particularly well favored by having these materials in large quantities which do not carry undesirable impurities.

The general processes of manufacture are comparatively simple and easily understood, but there are many details that must be regarded which make the manufacturing process comparatively delicate and difficult. After the materials are quarried they are crushed, dried, and then reduced to a very fine powder technically called

clinker. After cooling it is passed to a new set of grinding machinery and the process of grinding and pulverizing is repeated practically the same as the first grinding of the raw material. From here it goes to the storage bin and is shipped to market, the commercial unit being the barrel consisting of 330 pounds. Years ago the material was actually put into wooden barrels, but a cotton bag long ago drove the barrel out of the market, although the name is still retained.

The great value of Portland cement depends upon the property Portland cement has of hardening or setting when mixed with water even though it may be entirely submerged. It is not soluble to any considerable extent, but takes up water and thereby hardens in a manner very similar to the hardening of plaster of Paris. A mortar made of Portland cement may be used underground or under water, or in any kind of masonry for brick or stone. When thoroughly hardened it makes practically a solid mass or monolith of the entire masonry.

In Southeast Kansas where natural gas is so abundant and cheap, Nature also provided a great abundance of the best of limestone and shale for making Portland cement. Coal or other fuels may be used, but gas is as good or better. In general a ton of coal will manufacture about ten barrels of cement, the actual amount varying at different mills. With gas at three cents a thousand cubic feet we have an equivalent of coal at from 50 to 60 cents a ton. In localities where coal would cost \$2 a ton, this would be a saving of from 14 to 15 cents a barrel, an amount sufficiently great to pay freight on shipping the cement a long distance. Kansas gas-burned cement is now shipped as far north as Iowa and Minnesota, as far east as the Mississippi, and south and west to the Gulf and the Pacific Ocean.

A Correction and Explanation Concerning Parasites.

EDITOR KANSAS FARMER:—Please make a correction to an error in the printing of my article entitled "An Important Enemy of the Hessian Fly and Other Parasites," which appeared in your paper of April 12. The sentence which is printed wrong reads as follows: "With the hymenopterous parasites, the female selects her victim usually when she is in the larval or worm stage, etc." This gives an entirely wrong sense and involves a point that I endeavored to make especially clear. If my manuscript had been followed accurately, the reading would have been thus: "With the hymenopterous parasites, the female selects her victims usually when they are in the larval or worm stage, etc."

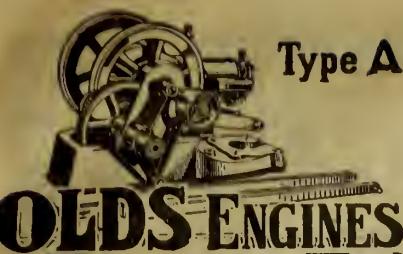
For further explanation, I might mention that the female parasite (she would be in the adult or winged form to become a parent), does not harm her victims beyond laying her eggs on them. Then her mission in life is fulfilled and both males and females perish shortly after the mating period. The young parasites which issue from the eggs in the form of grubs are the creatures which feed on the host. Only during the time they remain as grubs, otherwise called the larval stage, are these parasites effective. Then they subsist within the body of some caterpillar, or grub, or maggot, sometimes inside the egg, cocoon, or pupa of another insect, and also in soft-bodied adults like the plant-louse. The parasitic grub becomes full grown by the time its host dies and then it transforms into a fly ordinarily possessing four wings, which is the adult or parent stage. Thus the adult completes the life history after laying eggs to start another generation.

The fact is not always understood that most insects begin life as worm-like creatures without the least resemblance to the parent form. Their transformations or metamorphoses are wonderful processes of nature. Many complex features attend the lives of insects, and the student is repeatedly

\$16.00 AN ACRE
in Western Canada

160 ACRE FARMS IN
WESTERN CANADA FREE

is the amount many farmers will realize from their wheat crop this year.



OLDS ENGINES.

There is no gas engine as simple as an Olds—compare it with others and this statement is proved. The repairs cost practically nothing.

The Most Economical Engine

For pumping, sawing wood, feed grinding, churning, and all farm work.

The reason why is interestingly told in our catalog mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalog showing Type A (2-8 h.p.), Type G (8-50 h.p.), Types K and N (12-120 h.p., used with our Gas Producer, it will reduce fuel cost 75 per cent.)

Celebrated Picture Free.

For 4c in stamp to pay cost of mailing we will also send you Ross Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16x20 beautifully colored, suitable for framing.

OLDS GAS POWER CO.
Formerly Olds Gas Eng. Wks.
Lansing, Mich.

confronted with mysteries which often grow deeper as investigation progresses.

Other kinds of insect parasites with internal habits similar to the hymenopterous enemies are found among the two-winged flies which belong to the order Diptera. They attack many different animals besides insects and, in some cases, are harmful to live stock. Here again we find not the adults but their larvae—which are called maggots in respect to flies—as the active parasitic agents.

Insect parasites which live externally on their host are generally degraded wingless forms, for the adults are as dependent as their young. The ordinary lice are common examples. Such names as lice, ticks, and mites are, however, much confounded in meaning, being also applied to parasites that are not true insects, since the ticks and mites are mainly classed with the spiders.

Sometimes those insects which attach themselves to plants after the manner of scale-lice or create galls in which they live and thus absorb nourishment during their lives are regarded as parasites also. Hence we find different degrees of parasitism. But when the potato bug is held up as an example, such being recently noticed, the conception of a parasite is rather overdrawn. Parasitism is common among plants as well as animal life. Disastrous plant diseases are produced by fungus parasites and they cause quite as much damage as injurious insects. This subject, however, leads us into questions of practical farming, and, for instruction in these matters, the farmer is referred to the many helpful books which can be obtained at slight cost. One little book which deserves recommendation here on account of its simple and attractive style is called "First Principles of Agriculture." It was written by Professors Goff and Mayne for introduction into rural schools and is published by the American Book Co. Price 80 cents. The company also publish Stoke's "Ten Common Trees" (price 40 cents), and Walker's "Our Birds and Their Nestlings" (price 60 cents).

The publisher of THE KANSAS FARMER will be glad to supply any of these books to reader on receipt of price.

E. S. TUCKER.

The Age of Cement.

Seventy-five per cent of the farms of America are a disgrace to their owners, from the standpoint of neatness and appearance of the buildings and surroundings. Wooden structures in varying stages of collapse; rotting fence posts; inefficient watering troughs, and floors of barns and cellars all speak of decay and temporary use. If these farmers could be awakened to the importance of building for all time instead of for a day, the sum total of prosperity and enjoyment in country life would be immeasurably increased.

It has been suggested that the huge stones used by the ancient Egyptians in the building of the pyramids and other monuments which have endured thousands of years, were not quarried out of solid rock, but were made from some substance resembling our modern cement, formed in molds on the site of their final occupation. Their process may be another of the lost arts, and if so we are but repeating history, for we most certainly are entering upon an era

when cement is bound to constitute our dependence in permanent buildings of all sorts.

The hold which cement as a building material has in the world to-day is as strong and lasting as the material itself. Timber is becoming scarce, and at the present rate of consumption the supply in the United States will not last longer than forty years. A durable and satisfactory successor of wood may be found in Portland cement combined with sharp sand and gravel in the proportions of one part of cement to two of sand and four of gravel or stone for very strong and waterproof work, or one part of cement with two and a half of sand and five of coarser material for ordinary work, and one of cement to three of sand and six of stone or gravel where strength is of minor importance. Mixed for ordinary work a barrel, or 330 pounds of cement (3½ cubic feet), will make about 27 cubic feet of concrete. As the sand fills the spaces between the stones (or gravel) and the cement fills the spaces between the grains of sand, the total quantity of concrete will be but slightly in excess of the original quantity of gravel or broken stone.

Portland cement costs \$1.40 a barrel at the mill, and other materials cost according to the hauling distance. At 80 cents a yard for sand or gravel the cost per cubic foot of concrete is around 8 cents, exclusive of labor.

It is often found that concrete construction is absolutely cheaper than lumber, and possessing the additional advantage of being fireproof and permanent. It is used for gutters in stables, cellar and stable floors, drain tile, silos, sidewalks, fence posts, bridges, houses, barns, watering and feed troughs, ice houses and cisterns. There seems no limit to its usefulness. The simplicity with which it is handled commends it to these unskilled in carpentry. Cement should be mixed with its bulky companions in a dry state and just enough water added to make it pack well. A mold for the form required is then filled and tamped down hard and allowed to set for twenty-four hours, when the mold may be removed; or if made with hinges, as are fence post molds and other small forms, it may be removed within a few minutes. Surfaces are generally finished off with a smooth coating of pure cement. Buildings are made from separate blocks or constructed in a solid wall. One of the latest methods is to build this wall hollow, thus making a frost-proof structure, warm in winter and cool in hot weather.

Of the several kinds of cement, Portland possesses the highest cementing power and an additional virtue of hardening under water. All cement should be kept dry. When properly protected it often improves with age. Crushed stone makes a somewhat stronger concrete than gravel; cinders are frequently used. The mortar may be colored to suit the fancy of the builder, and some very beautiful houses are now made of this material.

The Department of Agriculture has issued a Farmer's Bulletin (No. 235) on "Cement Mortar and Concrete," with special reference to its preparation and use for farm purposes. This bulletin is for the asking, and gives in detail many valuable hints and methods impossible in this space.

Farmers should use nothing but a good grade of cement. It is made by a number of concerns. Do not buy from unknown dealers. Several firms make iron molds for fence posts, tile, building blocks, etc., and these will greatly facilitate construction, being cheaper usually than to have one made by a machinist.—Farmers' Voice, Chicago.

Profitable Dairying.—A practical guide to successful dairy management. By C. L. Peck. Illustrated. 5x7 inches, 200 pages. Cloth. Price 75 cents. Orange Judd Company, New York.

The author of this volume is a well-known, practical dairymen, who has made dairying a marked success and who, in this volume, gives such practical hints on dairying as will enable the reader to improve his methods, better his conditions, and more nearly attain that point in business known as success. The treatment of the entire subject is thoroughly practical in every detail, being principally a description of the methods practiced by the author and which after a lifetime of experience and study he has found most advantageous. Yet the scientific hearing on the subject has not been neglected, as the author has availed himself of all the most recent discoveries and advancements in science, thus making the work authoritative, practically as well as scientifically.

Clovers and How to Grow Them.—By Thomas Shaw. Illustrated. 5x8 inches. 337 pages. Cloth. Net, \$1. Orange Judd Company, 439-441 Lafayette Street, New York, N. Y.

This is the first book published which treats on the growth, cultivation, and treatment of clovers as applicable to all parts of the United States and

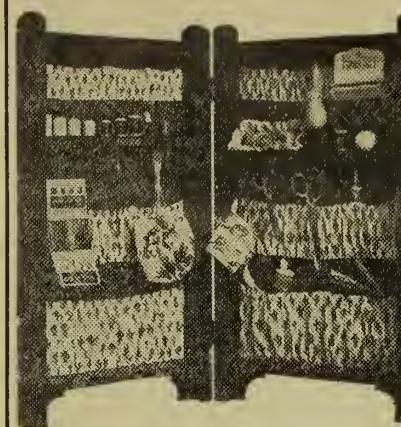
THE KANSAS FARMER

Simpson - Eddystone Silver Greys

The standard dress-goods for over sixty years. You can always depend on their uniform high-grade quality, fast color and beautiful designs. Desirable material for any time of year.

Ask your dealer for
Simpson-Eddystone Silver Greys.
Three generations of Simpsons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



It makes a splendid present

Send for free booklet to-day—it's so easy to forget it—and please mention Kansas Farmer

Her Majesty's Sewing Cabinet

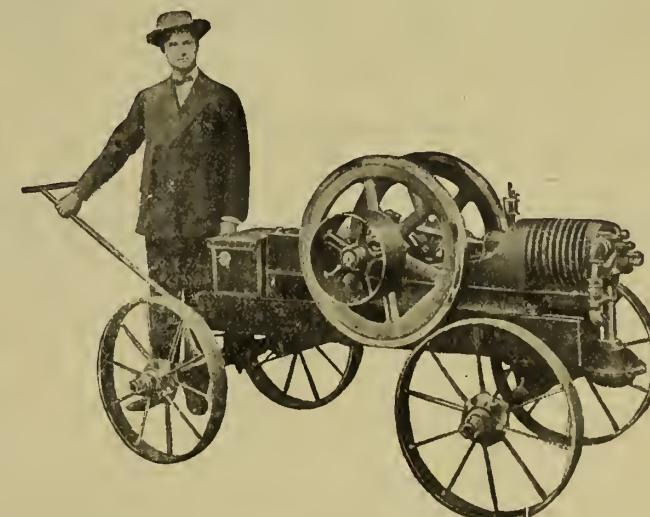
"Enclosed find check for Sewing Cabinet. It is fully up to expectation and my wife is greatly pleased with my purchase." F. M. BUSHNELL
Cashier Richland Savings Bank, Mansfield, O.

We receive such letters daily. There are no disappointments—it pleases them all.

This graceful, handsome piece of furniture is produced by the hands of careful, painstaking craftsmen in our own little workshop. Each Cabinet is completely equipped with everything a woman needs to sew with, and here are fourteen pockets that hold all of her unfinished work—keeps all the sewing together. It's a perfect delight—"makes real pleasure out of real work"—and is just the thing any Kansas Farmer reader will enjoy.

Write for our free descriptive booklet with prices for the different styles, and also please tell us the color scheme of your sewing room that we may suggest a cabinet that will harmonize with its furniture, fittings and decorations. We pay the freight.

ART CRAFT WORKSHOP, 342 Dearborn Street, CHICAGO, ILLINOIS



We wish to call the attention of the readers of KANSAS FARMER to the Waterloo line of gasoline engines. The accompanying cut shows their "Waterloo Boy" hand portable. This is a handy, light portable engine suitable to move from place to place on the farm. Weight of complete outfit only 600 pounds.

The Waterloo Gasoline Engine Company also manufactures a complete line of stationary, pumping, and standard portable gasoline engines. It would pay you well to investigate the Waterloo.

Canada, and which takes up the entire subject in a systematic way and consecutive sequence. The importance of clover in the economy of the farm is so great that an exhaustive work on this subject will, no doubt, be welcomed by students in agriculture, as well as by all who are interested in the tilling of the soil. After thoroughly explaining the principles and practice of successful clover-cultivation in general, the most important species and varieties are discussed in detail. With each are given its varieties, pasturing, harvesting for hay, saving seed, renewing, value as fertilizer. Thus each chapter is complete in itself.

Diseases of Swine.—By Dr. R. A. Craig, Professor of veterinary medicine at the Purdue University. A concise, practical and popular guide to the prevention and treatment of the diseases of swine. Illustrated. 5x7 inches, 200 pages. Cloth. Price 10 cents. Orange Judd Company, New York.

In no other class of farm animals is so little attention given the prevention of diseases as in swine and as a result, the per cent of loss is about twice as great as it is in other species. In discussing the different diseases, the causes and preventive measures are given special attention by the author. The book is conveniently divided into four parts. Part I treats on general diseases, their diagnosis and the methods of administering medicines. With the discussions on each disease are given its causes, symptoms, treatment and means of prevention. The succeeding parts treat on surgical diseases; infectious diseases, and parasitic diseases. Every part of the book impresses the reader with the fact that its writer is thoroughly and practically familiar with all the details upon which he treats. All technical and strictly scientific terms are avoided, so far as possible, thus making the work at once available to the practical stock-raiser, as well as to the teacher and student.

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.

P. O.

When writing advertisers please mention this paper.

Dairy Interests

Grading Cream.

OSCAR ERF, PROFESSOR OF DAIRY HUSBANDRY,
KANSAS STATE AGRICULTURAL COLLEGE.

The future development of the dairy industry in Kansas depends upon the profits of the dairy business, which is governed entirely by two factors, (1), the cost of production of dairy products; (2), the price received for dairy products. While the first factor plays an important part in the dairy business, it is the second factor that is desired to be considered in this treatise.

The second factor depends entirely upon the demand and supply, and this again depends upon the quality of the article which affects the consumption. To show the significance of this statement, a test was made in which good second-grade butter was supplied on the tables of a series of boarding houses. Without bringing the attention of the boarders to the fact, the butter was changed to fresh butter, classed as first-grade. The consumption was immediately increased approximately thirty-three per cent, and if a still poorer quality than second-grade butter had been furnished, the variation in the amount consumed would have been much greater. Since this paper is to take up only one phase of the dairy industry, namely, the butter side, it is our intention to make clear the great importance of the relation that the quality of the butter bears to its consumption.

Owing to the great progress that has been made in dairying within the past few years, and owing to the fact that it becomes quite necessary to introduce dairy methods in Kansas in order that the fertility of the soil may be maintained, and to establish permanent and prosperous conditions, it was found that the creamery and dairy methods employed in the East were not suited to the conditions in Kansas. Owing to the many localities in Kansas which are sparsely settled, it involved a great expense to transport milk, on account of its bulky nature, to a central point, as is still done in the East. To overcome this objection in these localities and to bring about conditions which permitted the average farmer to sell his cream on an open market, the same as he does grains and other farm products, it became necessary to introduce what is now called the hand-separator system, by which every farmer who purchased one of these cream-separators could skim his milk, feed the skim-milk to farm animals, store his cream for several days, and finally haul the product to the creamery or station to be sold to some creamery where it is ultimately made into butter. These circumstances brought on conditions which were quite unfavorable for the production of first-class butter. These conditions came about in the following manner:

First, on account of the fact that the farmers were not accustomed to operating the hand-separator and keeping it in a perfectly sanitary condition, which is so essential in the art of dairying. Thus at times milk was run through filthy separators which tainted the cream and started a serious fermentation.

Second, since it is the milk-sugar and casein which are the chief constituents of skim-milk that are most fermentable, and since cream consists merely of butter-fat and skim-milk, it would under all conditions be more profitable for the farmer to remove and retain as much as the skim-milk as possible, which would reduce the weight of vol-

ume and thus lessen the transportation expense. But the importance of regulating the cream-separator was not recognized, and a great deal of thin cream was shipped, which made conditions more favorable for the development of taints and bad flavors in cream.

Third, cream produced under these conditions was kept for a long time before it was delivered. On the average Kansas farm very few appliances are at hand to cool the cream, and under ordinary temperatures, such as we would expect to find on a farm, it would not require more than two days to set up a fermentation in the cream which would develop a sourness sufficient to make it ripe enough to churn. Hence, it can be stated without further explanation that cream kept for a week or two becomes overripe, and in a certain sense of the word, decayed.

Fourth, long distances of transportation and the lack of cooling facilities on the train were still more conducive to the furthering of the fermentation. Out of such a product the butter-maker could do little to restore the quality, and to make an extra butter out of this cream would be impossible.

Fifth, with this method of handling cream, fierce competition began. Any cream, no matter how old or how rancid, had a market at the creameries at the same price per pound of butter-fat as that paid for first-grade cream. According to this method the man who was neat and clean in his operations and handled his cream under the most sanitary conditions received the same money as the man who paid no attention to the quality of his cream. Hence, there was a constant tendency for the dairymen of Kansas to produce cream of a poor quality.

Sixth, owing to this unhealthy competition the price of butter-fat was enhanced and the creamerymen were obliged to resort to methods which would tend to increase the overrun of the butter in order that they might have a fair margin of profit. The overrun in short is the difference between the butter-fat and the butter. It consists chiefly of water and salt, with a small amount of casein, milk-sugar, and ash. By increasing the overrun, water was incorporated in the butter, which naturally resulted in reducing the quality of the butter if more than 16 or 18 per cent were incorporated.

THE GRADING OF BUTTER.

The great markets of the United States score butter under the following plan:

Flavor	45
Body	25
Color	15
Salt	10
Package	5

FLAVOR.

The value of butter over grease depends largely upon flavor and aroma. To make a good-flavored butter we must have good milk to begin with. The principal defects in flavor can be classed under four heads:

1. Rancid flavor.
2. Tainted flavor.
3. High acid flavor.
4. Low acid flavor.

The cause of rancidity in fresh butter is due:

1. To old milk or old cream.
2. To unsanitary conditions by using filthy utensils and apparatus.
3. To a poor, loose body containing large quantities of casein, which, when contaminated and kept at a warm temperature for a short time, develops rancid acid very quickly.
- Tainted flavor in butter is caused:
 1. From tainted milk or cream.
 2. From the impure water with which it is washed.
 3. From unclean or badly flavored salt.
 4. By the use of unclean utensils, such as churn, worker, ladle, packing boxes, etc.
5. By storing in places where odors are strong from filth of foreign substances placed around it.

The high acid flavor is due:
To cream being held at too high a temperature for too long a time.

A low acid flavor is due:
To cream being held at too low a temperature for too short a time.
If the flavor of butter is perfect its value as given in the card is 45 points.

BODY.

The body of the butter should have a granular, yellow, amber appearance. The cause for the difference in appearance in texture between butter and grease is due to the amount of water incorporated in butter. There should be approximately 16 per cent of water in butter—not less than 12 per cent, and not more than 17 per cent.

The defects in the body of butter may be divided into six classes:

1. Too much water.
2. Greasy.

DON'T DELAY BUYING —YOUR— CREAM SEPARATOR

Although the cream separator is an all-the-year round machine, right now is the best time to buy one if you have not already done so. Within the next two months the milk flow of most herds will be doubled, and savings will count biggest. If you haven't a separator to take care of this extra milk, a great percentage of your entire year's milk profits will be lost. Any one who has two or more cows should by all means take steps to secure a good separator without delay. If you buy one at once it will more than half pay for itself before the middle of the summer. Otherwise, just so much money will be lost, wasted, thrown away. Why not have a DE LAVAL machine set up at once in your dairy for a free trial, where you may test and try it out. This will cost you absolutely nothing, and you can see and learn for yourself just what the separator will save you. Over 700,000 users have already proven the DE LAVAL to be the most profitable thing on the farm, and the number of DE LAVAL machines sold to date is ten times all others combined. Hence, there is no reasonable excuse why any one who is desirous of securing the largest possible milk profits from their cows should not at least give the DE LAVAL a fair trial. Don't delay, but write us to-day for a free catalogue and full particulars concerning how you may secure a DE LAVAL machine. Those who haven't the ready cash with which to purchase a separator should remember that the cash is not necessary in buying a DE LAVAL, for it can be purchased upon such liberal terms that it will more than save its cost while it is being paid for. Write to-day.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO. 109-113 Yonville Square
PHILADELPHIA. 1213 Filbert Street
9 & 11 Drumm Street,
SAN FRANCISCO

General Offices: 109-113 Yonville Square
MONTRÉAL! 75 & 77 York street,
TORONTO. 14 & 16 Princess Street
NEW YORK. WINNIPEG.

FOUR CENTS MORE FOR NO. 1 CREAM THAN FOR NO. 2

The creameries of the country have become so convinced of the increased value of thick cream over thin cream that many of them are paying a premium on cream containing 30 per cent or more butter fat over that containing under 30 per cent.

One of the largest buyers of cream in the West, the Hanford Produce Co., of Sioux City, Iowa, issued in January the following statement to its cream shippers.

"We are going to offer a premium of **4 cents per pound** butterfat for what we term No. 1 cream.

FIRST GRADE cream shall consist of all hand separator cream which is delivered at least twice a week in winter and three times per week in summer, this cream to be delivered reasonably sweet and testing **30 per cent or more.**

SECOND GRADE cream shall consist of all hand separator cream delivered in good condition not less than once a week or testing **less than 30 per cent.**

Under these conditions creamery patrons should buy only the cream separator that can skim a heavy cream. The

UNITED STATES CREAM SEPARATOR

can skim a heavier cream than any other and do it **without clogging**. The U. S. has the record of skimming a cream testing **65 per cent**. And remember also that the U. S. holds the **World's Record** for clean skimming.

It gets the **most cream** and will deliver **as heavy a cream as you want**.

Write for copy of our fine, new, 1906 separator catalogue. It tells **why** the U. S. can skim the **first grade** cream; how it made the World's Record for clean skimming and many other things you should know before you put any money into a cream separator. Write for a copy today—do it **now** while you think of it. Ask for catalogue No. 400 and we'll send it **quick**.

VERMONT FARM MACHINE CO.,

Bellows Falls, Vt.

We probably have a selling agent in your vicinity, and if so, will give you his name when we send you the catalogue. It is his business to show you a U. S. Separator if you want to see one.

437

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

Sharples TUBULAR CREAM SEPARATORS

WHICH DO YOU WANT?

Tubular or Bucket Bowl?
Simple Bowl or Complicated?
Izzers or Hasbeens?
Waist Low Can or Head High Can?
Seli Oilng or Oil Yourself?
Wash 3 Minutes or Wash Thirty?
All the Butter or Most All?
Best Butter or Medium Butter?

Tubulars are different, very different. Just one Tubular—the Sharples. All others make bucket bowls—can't make Tubulars because they are patented. Ask for catalog Q-165.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
TORONTO, CAN. CHICAGO, ILL.

3. Oily.
4. Tallowy.
5. Cheesy.
6. Milky body.

Too much water is due:

1. To insufficient working.
2. Working butter too cold or too warm.

3. Washing butter with warm wash water when churned at a low temperature.

Creamy butter is due:

1. Butter handled or worked too much.

2. Churned in unwashed or unscalded churn, worked on unscalded workers, and handled with unscalded ladies.

3. Butter worked below fifty degrees assumes a creamy appearance.

4. Butter worked at too high a temperature assumes a similar appearance.

Oily butter is due:

1. Soft, succulent feeds, gluten feeds, or oil-meal.

2. To a specific fermentation.

3. To heating the cream near the boiling point when pasteurizing.

Tallowy butter is due:

1. To improper feeding, for instance, too much cottonseed-meal or bran in proportion to other feed.

2. To a lactic fermentation.

Cheesy butter is due:

1. To the curdling of cream, either sweet or sour.

2. To a milky body.

A milky body is due:

1. Buttermilk not separated from butter, or butter not thoroughly washed.

2. Butter made fromropy cream.

The body of butter if perfect counts 25 points.

COLOR.

The color of butter should be of a light straw color, and the defects in color may be classed as follows:

1. Too yellow.
2. Too light.
3. Mottled.
4. Specked.

5. Streaky and wavy.

Too yellow butter is due:

To the use of too much coloring matter.

Too light is due:

To insufficient coloring matter.

Mottled and streaky is caused:

1. By developing a high acid in cream or starter and the incorporation of the froth of the cream.

2. By improper separation.

3. Change of temperature.

4. Sudden chilling before salt is dissolved.

5. Insufficient working.

6. Uneven distribution of salt.

Specked butter is due:

1. To over-ripe cream.
2. To dried cream.
3. To foreign matter.

Color counts for 15 points.

SALT.

The salting of butter depends largely upon the demands of the market. However, butter may be:

1. Excessively salted.
2. Not salted enough.
3. Gritty.

Gritty salting is due to salt being too hard or not giving salt time enough to dissolve.

Salt counts 10 if perfect.

BUTTER PACKAGE.

Neatness of package has much to do with the increased consumption of butter. Butter, if put up in prints, should be wrapped in parchment paper to preserve it. Prints should be square and have a neat, trim appearance. Whatever may be the condition, the man that puts his butter up in the handsomest packages will sell the most butter if other conditions are equal.

The value of package if perfect counts 5.

Butter, being first scored, is then graded into extras, firsts, seconds, and

thirds. The rules governing the grading of extras is that it shall consist of high-grade butter produced during the season, scoring not less than 93 points. The following are the requirements of extras:

1. Flavor—Must be fine, fresh, and clean if of fresh make, and good, sweet, and clean if held in storage.

2. Body—Must be firm and solid, with a perfect grain or texture, free from saltiness.

3. Color—Must be uniform, neither too light nor too high.

4. Salt—Well dissolved, thoroughly worked in, not too high nor too light.

5. Package—Good and sound, as required in classification.

FIRSTS.

Firsts shall be a grade just below extra, scoring 87 points or higher, lacking somewhat in flavor, which, however, must be good, sweet, and clean. All other requirements are the same as in extras.

SECONDS.

Seconds shall consist of a grade just below firsts, scoring not less than 80 points.

Flavor—Must be fairly good and sweet.

Body—Must be sound and smooth boring.

Color—Fairly good, although it may be somewhat irregular.

Salt—May be irregular, high or light salted.

Package—Same as required in firsts.

THIRDS.

Thirds shall consist of butter below seconds, scoring not less than 75.

Flavor—Reasonably good, may show strong tops and sides.

Body—Not smooth boring.

Color—Mixed or streaked.

Salt—Irrregular.

Package—Miscellaneous.

(To be continued.)

The Profitable Dairy Cow.

PROF. C. S. PLUMB, OHIO STATE UNIVERSITY.
(Continued from last week.)

JOHN'S TRIP AND THE RESULTS.

One day at the dinner-table, John surprised the family by announcing that he was seriously considering going to the World's Fair. He would enjoy the change, but as he said, "Father, I would like to see the dairy-cattle test and study the cows there a bit. As those animals represent select ones of different breeds from over the country, I should like to examine them and study both type and breed." "Well, if I were you, John," said the elder, "I would not only see those cattle, but would stop at Syracuse and Rochester and see those two herds at Firth and Bogswell. We have read a deal of them and of the remarkable records some of their cows have made, and it might pay you to stop en route and see them. You might pick up some ideas on breeding and management."

This accounts for John going away on a vacation in July after the haying was finished, a thing he had never been guilty of before. He felt kind of guilty as he was driven to the station, all dressed up in his Sunday best, for he knew the folks would have to do his chores. But he believed it would pay. He did not realize then, like many another good brother, that travel is a great education in itself. He learned that later. As he sped across country in the rapidly moving train, through fertile valleys, over rich bottoms and along by rolling uplands, he saw many herds of cattle, kept mainly for milk-production. He was greatly impressed with their variation and their apparent inferiority, even when seen from the cars. It was a revelation to him. In later years, when travelling through the green pastures of England and Scotland, among the many uniform herds there, his mind harked back to that trip across American soil on that warm July day. The contrast was striking, and he felt full sure that it was educational in its effect. If some of his fellow countrymen could have seen these sights as he did, he was sure they would have taken the lesson well to heart.

The exposition reached, the cows soon came in for examination. They represented both dairy and general-purpose type, but it impressed him that from the point of dairy value, the closer the cows adhered to dairy type, the better they ranked in production. There were exceptions, but the average of a class was what he judged by. From the profit point of view, he saw more money in the udder of capacity than he did in the thick buttocks and meaty back and breast. The working dairy records were also demonstrating that one class gave better returns than another. He was particularly impressed with several individuals, not

the best in type, but with large capacity, who were giving the highest yields. This was a new idea to him, and he was particularly interested in the fact that the cows with the largest capacity were not necessarily the best in type. This was a new idea to him, and he was particularly interested in the fact that the cows with the largest capacity were not necessarily the best in type. This was a new idea to him, and he was particularly interested in the fact that the cows with the largest capacity were not necessarily the best in type.

Get the Cream

GET IT ALL, GET THE LAST DROP. BUY DIRECT FROM THE FACTORY AT FACTORY PRICES AND SAVE 20% to 50%

It's to your interest to know about the liberal selling plan of the

Davis
Cream Separator

No other skimming device known so surely gives you all the cream, and none does it with so little work. It is absolutely the simplest and easiest running separator. Only 8 pieces in its bowl. Think of the ease of keeping such a bowl clean. It never can get out of balance. The tank is only bolt high, no high lift. You should know all about the Davis. Investigate before you buy. Write to-day for money saving catalog No. 128.

DAVIS CREAM SEPARATOR CO.,
54 North Clinton St., Chicago, Illinois.



THE KANSAS FARMER



YOU CAN'T AFFORD TO MAKE A MISTAKE.

Don't buy a cream separator that makes more work. Many of them do, but you need not get one of that kind. Investigate. You can try an

OMEGA Cream Separator

before you buy it. If you do not find that it is more easily turned; more durable than any other, we will not even ask you to keep it. You can thoroughly wash it in 3 or 4 minutes—long before the bowls of other separators are "run down." It drains itself. It does not whip the cream nor break the butter fat globules. It requires no special tools for its care. It is the real labor-saving separator. You really ought to investi-

gates it.

Is this fair?

If you keep milk cows we will set up an Omega separator on your place, and let you try it. If you don't find that it turns more easily, is more quickly and easily washed, gives less trouble, gets all the cream, and of a finer quality than any other—you need not keep the Omega, and the trial will cost you nothing. Will it not pay you to investigate?

Send us your name and address. "More Milk Money" tells how to care for cows; how to make butter; how to select good cows; how to wash butter; how to avoid "white specks," and a hundred other things you ought to know. FREE if you tell how many cows you keep, give address of a neighbor who keeps cows, and mention this paper. Ask also for catalog.

THE OMEGA SEPARATOR CO.
23 Concord St., Lansing, Mich.

Cleveland Cream Separator

Direct to You
30 Days Approval Test

Easy Running:—In the Cleveland Separator this isn't an empty claim. The whole thing is summed up in an honest, easy to prove reason. The Cleveland is the only ball-bearing separator made.

Easy Cleaning:—The Cleveland has fewest parts and skinning device is made of aluminum. Investigate. You will find this metal is non-corrosive, non-poisonous, milk cannot stick to it and there is no coating to wear off. We prove these things.

Long Life:—The Cleveland has the fewest parts of any separator made and gets along at the slowest speed. Parts can't wear out that are not there. The Cleveland is a guaranteed perfect Skinner.

How We Sell:—To you from our own factory. The only manufacturers making a high grade separator and selling it at a fair, square price and a fair, square plan. No money in advance. No note to sign. No fuss of any kind. The catalog tells you. Write for it.

THE CLEVELAND CREAM SEPARATOR CO.
Dept. B, 34 Michigan Ave., N. W.
Cleveland, Ohio.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid any part of U. S. Address

E. T. DAVIS CO., Tippecanoe City, Ohio
Send your orders quick.

A Reward FOR THE Man Who Milks

The man who ships his cream direct is rewarded for quality. He stands alone. He doesn't have to bear the burdens and suffer for the mistakes and carelessness of his neighbors. If your cream is clean and not too sour and good flavor, you get the highest grade and the best price. If your facilities for handling your cream are better than your neighbor's and you can keep it longer you need not ship so often. Consequently you economize on time.—"Time is money."

Everything favors the individual shipper.

Our system takes care of him. Our factory is his natural home.

Send us your cream and we'll send you the money.

Respectfully,

**BLUE VALLEY CREAMERY CO.,
ST. JOSEPH, MISSOURI.**

Peerless Cream Separators

Reasons Why the PEERLESS is the Best

1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.

3d—Enclosed frame, free from dust. Injury resulting from machine impossible.

4th—Perfectly noiseless.

5th—Heavy enough and strong enough to lift a box car, which insures durability.

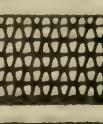
6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1,000 of an inch.

7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the tight draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.

8th—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

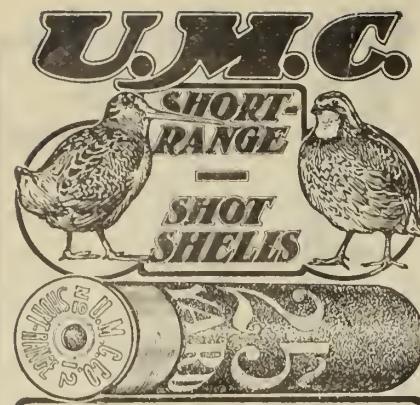
BRADLEY, ALDERSON & CO.,
Tenth and Hickory,
KANSAS CITY, MO.



Thirty-One Styles of Farm Fencing

Sold direct to consumers on thirty days trial at wholesale prices. Catalogue free.

THE FARMER'S FENCE CO.
Box 30, Mervin, Kansas.

**"They are a Success"**

Thousands shot them last season because they give an open pattern, even in a choked gun. Will not mutilate at short range.

DESCRIPTIVE FOLDER FREE

U.M.C. cartridges are guaranteed, also standard arms when U.M.C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.
Agency - 313 Broadway, New York

How Is Your Heart?

Is your pulse weak, too slow, too fast, or does it skip a beat?

Do you have shortness of breath, weak or hungry spells, fainting, smothering or choking spells, palpitation, fluttering, pains around the heart, in side and shoulder; or hurt when lying on left side?

If you have any of these symptoms your heart is weak or diseased, and cannot get better without assistance.

Dr. Miles' Heart Cure strengthens weak hearts, and rarely ever fails to cure heart disease. Try it, and see how quickly you will find relief.

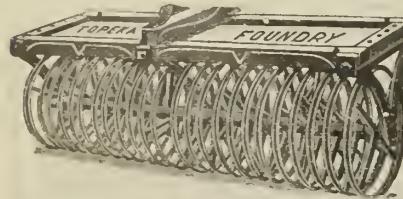
"About January 1st, 1902, I took down with weakness and dropsy, and gradually grew worse. I was told by my family physician that my case was hopeless. My neighbors and family had given me up to die. My limbs and body were swollen to one-third larger than normal size, and water had collected around my heart. For at least three months I had to sit propped up in bed to keep from smothering. I sent for five bottles of Dr. Miles' Heart Cure, and by the time I had taken them all I was entirely cured. I feel better than I have for twenty years, and I am able to do any kind of work on my farm. My attending physician told me that if it hadn't been for Dr. Miles' Heart Cure I would now be in my grave."

L. T. CURD, Wilmore, Ky.

Dr. Miles' Heart Cure is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails he will refund your money.

Miles Medical Co., Elkhart, Ind.

DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the KANSAS FARMER one year, both for only \$2.50. Address,
THE KANSAS FARMER CO.
Topeka, Kans.

When writing our advertisers please mention this paper.

so much for breed as for dairy character.

On the return home a short stop was made at the two herds referred to by his father, and here he saw many great cows of wonderful capacity. He noticed that they had wonderfully well-lighted barns on their farms, and he saw their advantage, knowing that tuberculosis, that dread disease among cattle, would not thrive in plenty of light. He also noticed that the calves were provided with nice healthy pens, where the sun in winter could reach them. These stables were not especially expensive, but they were sanitary, furnishing absolutely necessary conditions for producing the best grade of milk. The stables were clean, the cattle free from dirt and dust, and though kept in during the day in this hot July weather on account of flies, they were in clean, healthful surroundings. These two farms sold milk to a very particular trade, one of them shipping to New York City. Recent years have seen patrons of milk-producers calling for far more care in milk-production, giving them an essentially germ-free milk. To show how particular some buyers are, Mr. Frith showed John a letter, of which the following is a copy:

"Please ship me two quarts of pasteurized milk from a cow whose bag has been washed in peroxide hydrogen and wrapped in antiseptic cotton during the heat of the day. I desire this from a cow that is given distilled drinking water, and is fed microbe-disinfected meadow grass, free from noxious weeds. Also see that her temperature is down to 80° F. when she is milked. See that the stable is thoroughly disinfected daily."

These herds showed strikingly the effects of careful breeding. He noticed the bulls used were short-legged and strong-bodied, with much quality. He found that the owners used sires from dams that had udders of very superior shape, and they stated that the daughters of these bulls tended to reproduce through them the mother's characteristics. Bogswell brought out a ring of four grand cows. He called them "The Big Four," and lined them up for his inspection, udders toward him. He marveled at their size and apparent capacity. The owners laid much emphasis on the part the bulls played in fixing this type. Bogswell more than once said: "Mr. Winslow, the bull is more than half the herd; yes, sir, more than half the herd."

John reached home after ten days of what seemed to him to be a most profitable and enjoyable trip. At the supper table that night he began the story of that journey, and the lights didn't go out in the sitting-room till far later than was common in the Winslow family. "John," said the old man, "what made the biggest impression on you in that dairy-cattle barn at the fair?" "The dairy type," said John. "I was satisfied after my inspection that these smooth, meaty cows could not do the business we want done."

Later that fall the final report on this exposition herd of ten different breeds was made. The father, after supper one night, pulled the wrapper from his "Dairy Intelligencer" and read the results of the test. Looking it over, he said: "John, your judgment on the exposition cows was good. Hear this from the report about results: A Guernsey, Mary Marshall, produced in six months a butter profit of \$59.49, ranking first. A Red Poll cow, named Mayflower, of a very milky type, which I remember you especially told about, stood second, her hutter making a profit of \$52.10. Excepting for this one case, the other cows of the first ranking ten were all cows of dairy breeds. Where the total record of five cows in each breed is recorded, I see that they show the Guernsey first, with butterfat worth \$230; the Jerseys second, with \$225 credit; the Ayrshire third, with \$218; and the Holsteins fourth, at \$211. From the hutter point of view, the dairy breeds beat the others out of their hoots. We had better stick to our type and work deeper into the breed, my son." "Yes, father," said John; "I believe it is absolutely essential, if we are to get the very best dairy results from our herd, that we must stick to cow type and never lose sight of its importance."

(To be continued.)

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Colorado Midland Railway. This engraving is 26 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamps by Morell Law, traveling passenger agent, 566 Sheildley Bldg., Kansas City, Mo., or C. H. Speers, G. P. A., Denver, Colo.

The school of thoughtlessness has many graduates.

The Poultry Yard

Conducted by Thomas Owen.

Theory vs. Practice.

The Biblical injunction to "Prove all things; hold fast to that which is good" applies to poultry matters fully as much as to religious affairs. A noted writer on poultry matters early this season advanced a new theory concerning freshly-laid eggs being unhatchable. He claimed that an egg taken from a hen as soon as laid and placed in an incubator would not hatch; that the animal heat in the egg had first to be eliminated from the egg and after cooling a day or two it would hatch all right. He had other reasons to advance for his theory. Now the writer had always surmised that the fresher the egg was the more surely it would hatch, but never having tested the matter he thought perhaps that this new theory might be all right. However, he determined to see for himself, being of the tribe of Doubting Thomas. He took an egg just laid, still warm, out of the nest and placed it in an incubator, and behold it was the very first egg to pip and it hatched out a strong, healthy chick. The next time he set his incubator he took several freshly-laid eggs and placed them therein and after marking them, watched the results. The rule was that they were the ones that pipped the soonest and of course hatched the soonest. So much for this man's very elaborately woven theory.

Another old theory used to be that when eggs for hatching are shipped a distance from home, they should be allowed to rest for at least twenty-four hours before setting under a hen. A great many poultry-breeders still advise their patrons to give the eggs a good rest before giving them to the hens, so as to settle the eggs after their rough usage on the journey. It was only a theory and does not hold good in practice. The eggs will have resting enough in the nest, and the sooner they are placed there after their receipt, the sooner you will have young chicks.

Another old theory was that you should feed young chicks just as soon as they come out of the shell. This has been exploded and now well-posted raisers of poultry rarely feed them anything for thirty-six or forty-eight hours after hatching and some go so far as to say seventy-six hours will not hurt them.

Another theory was that the very first thing to give young chicks was hard-boiled eggs, the most indigestible food you could give them. But as practical tests are made from time to time, all these fine-spun theories are exploded into the air and our feet are placed on the foundation of solid facts.

Poultry Notes.

In answering an inquiry relating to turkeys in last week's KANSAS FARMER, the types made us say "State Turkeys." We wrote slate but probably our 1 and 2 were so nearly alike, that the compositor could not distinguish one from the other. The name slate is given the turkeys on account of their color, being slate-colored.

After the hatching of chicks comes the raising of them, and the latter is more important than the former. One great cause of mortality among chicks is the exposure to sudden rain storms resulting in the drowning of thousands and the stunting of tens of thousands. When a rain storm comes up see that they are gotten under shelter before the storm breaks.

If you are having poor success with your incubator hatches, try manipulating the eggs more than you have been doing. Change their positions from one end of the tray to the other and from the sides to the center and ruffle them around so that they are in a different position each time you turn them, and that ought to be twice each day. The writer found a decided improvement in the hatches where he had handled them considerably, over the others where he had not disturbed them so much.

Rearing the Farm Turkey.

MRS. ANDREW BROOKS.

It has been my experience that the louse is one of the greatest drawbacks to successful turkey-raising. If turkeys have access to the same runs or buildings as hens, they are quite sure to be thus afflicted and the pests increase faster than on hens, and many puzzling losses among the young stock may be traced to that source. I take no

POULTRY BREEDERS' DIRECTORY.

FOR SALE—Choice Light Brahma eggs, \$1 for 15; \$1.75 for 30. Wm. Plummer, Barclay, Kan.

EGGS FOR SALE—Buff Rocks exclusively. Farm range, 50 cents for 15; \$3 per 100. F. S. Lovelace, Muscotah, Kans.

ROSE COMB BROWN LEGHORN EGGS, 15 for \$1.50 for 30, 100 for \$4. Mrs. John Holzhey, Benden, Kans.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, 15 for \$1.50 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED ROCKS and Silver Faced Wyandottes. Having hatched all the chicks I wish, will sell eggs from my high scoring pens at \$1.25 per 15; utility eggs at 5 cents each. Mrs. Chas. Ostorn, Eureka, Kans.

BARRED ROCK EGGS—Heavy winter laying strains. Pen No. 1, \$1.50 per 15. Pen No. 2, \$1 per 15; \$5 per 100. Mrs. W. H. Schreier, Aragona, Kans.

BUFF ROCKS—From fine stock. Eggs \$1.50 per sitting. A few good cockerels, \$1.50 each. M. Madden, Mound City, Kans.

SILVER WYANDOTTES EXCLUSIVELY—Eggs from State Show winners, 15 for \$2. Farm range Silvers, 100 eggs, \$4. Mrs. J. W. Gaus, Emporia, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1 each. Eggs, sitting \$1.50, for incubators, \$5 for 100. Address Ben Warren, Maple Hill, Kans.

FOR SALE—Silver Laced Wyandotte eggs; farm raised, \$1 per 15; \$4 per 100. Cumberland raspberry plants, \$6 per 1000. Frank Rice, Wathena, Kans.

COLLEGE HILL BARRED ROCK FAIR—Prizes won 1906. Wichita, 1st competing, 1, 2, 3, 4 hens, 1, 2, 3, 4 cockerels, 1, 2 pullets, 1 cock, 1, 2 pens; Oklahoma, 1, 2 hens, 1, 2 pullets, 1 cockerel, 1 cock, 1 pen. Judges McClare and Emery. Stock and eggs guaranteed. Mrs. J. Woodford, Wichita, Kans.

S. C. B. LEGHORN EGGS—From first cockerels at the State show, \$2.50 per 15. Other pens \$1 per 15. Mrs. Siller Seal, Meriden, Vt. ns.

R. C. B. LEGHORN EGGS FOR SALE—Stock from best laying strains \$1 for 15; \$5 for 100, best selected and fresh eggs. Mrs. Bertha Evans, Route 4, Box 32, Lyons, Kans.

WHITE WYANDOTTES—100% winter kind. Bred to high score, large eggs, 15 for 15; cockerels, Duskin strain, \$8 per 15; \$3 per 100. J. L. Moore, Eureka, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—Eggs, \$2 per 15; \$3 per 30. All orders given prompt attention. R. C. Capron, Route 7, Winfield, Kans.

BARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns. S. Spangled Hamburgs, S. C. Black Minorcas. Prize-winners in every pen. Eggs, \$1 per 15. Virga Bailey, Kinsley, Kans.

BLUE BIRDS—Parred to the skin. Hawkins Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kans.

EGGS FOR HATCHING from my flock of purebred B. P. Rocks. Pullets scoring 93; flocks headed by males scoring from 90% to 92%. \$1.25 per 15; \$6 per 100. Incubator orders a specialty. Eggs carefully packed. Address Mrs. Chas. Ainsworth, Euclid, Kans. Route 1.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Hettich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Shiley, Lawrence, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 96%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller, Mo. City, Kans.

FOR SALE—Throughbreed Gold-laced Wyandottes. Eggs, \$1 per sitting. J. A. Montgomery, 310 Parallel St., Atchison, Kans.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on ck. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. 6, Newton, Kans.

BLACK LANGSHAN EGG from main flock, 15 for \$1.00; 100 for \$5.00; from 1, \$2.00 for 15. Mrs. Geo. King, Route 1, Solomon, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—bred direct from a pen of U. R. F. Fitch's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Atchison, Kans.

BARRED ROCK EGGS, per 100. Mrs. R. A. Galbraith, White City, Kans.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. key eggs, \$3.00 per 11. J. C. Bostwick, Route 2, B. St., Kansas.

GREAT BIG S. C. BUFF O. PINTONGS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATTA'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandala, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

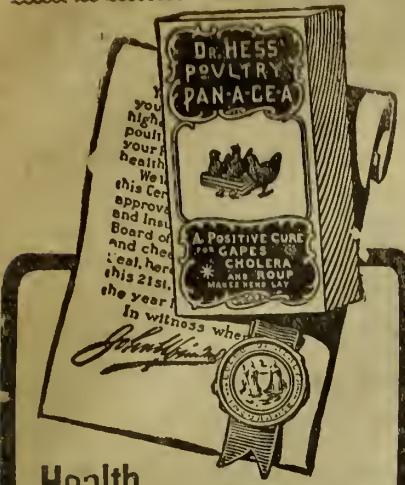
EGGS, EGGS—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE PLYMOUTH ROCKS—12 years breeder of choicest birds. Eggs \$1.50 per 15. Member American White. P. R. Club. J. E. Shinkle, Lakin Kans.

EGGS FROM MAMMOTH BARRED PLYMOUTH ROCK CHICKENS \$1.50 per 15. A. D. Wyncoop, Benden, Kans.

BLACK LANGSHANS—Hens scoring 98 and upward-headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kans.

POULTRY BREEDERS' DIRECTORY.



Health Insurance for Poultry

By correcting digestive troubles and destroying the poisonous germs of disease, Dr. Hess Poultry Pan-a-ce-a is a guarantee against loss. Every package is an insurance policy on the life of your poultry; on the health of every chick. Its action on the digestive organs it compels the system to extract the largest possible amount of nutrition from the food, and quickly converts it into bone, muscle, feathers, eggs, etc.

DR. HESS
Poultry Pan-a-ce-a

is the prescription of Dr. Hess (M.D., D.V.S.) and cures gapes, cholera, roup, indigestion, lice, laryngitis and the like. It is endorsed by leading poultry raisers in the United States and Canada. Costs but a penny a day for about 30 fowls. It is sold on a written guarantee. In sethens sprinkle both hen and nest with Instan Louse Killer, and the brood will come off free from lice.

1½ lbs. 25c. mail Except in
or express, 40c. Canada
5 lbs. 60c. and extreme
12 lbs. \$1.25 West and South
25 lb. pail, \$2.50

Send two cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK,
Ashland, Ohio.
Instant Louse Killer Kills Lice

BARRED PLYMOUTH ROCKS—Large pure-bred, good laying strain; have free range; eggs, fresh, select, packed carefully, \$1 per 30; \$1.50 per 45; orders filled promptly. Emma Bauer, Beatrice, Kans.

FOR SALE—Barred Plymouth Rocks, exclusively. Fresh eggs from mature stock, carefully packed. Mrs. T. B. Shulsky, Denton, Kans.

MAMMOTH BRONZE TURKEY EGGS—\$3. for 9 from choice hens and 34 pound young tom. Also a few Fox Terrier puppies. Safe delivery of eggs guaranteed. Mrs. L. E. Harness, Route No. 1, Speed, Mo.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Colie pups. W. B. Williams, Stella, Neb.

BARRED ROCKS—40 cockerels, \$2 will buy a good one; 50 pullets, \$1 each, shred buy a pure Bradley cock. I have an orchard flock of 60 pullets mating with large standard males, eggs \$1 per 15; \$5 per 100. A. C. Raitt, R. R. 4, Junction City, Kans.

BUFF PLYMOUTH ROCK EGGS for sitting, \$1.50 for 15. Jay S. Buck, Okaloosa, Kansas.

BARRED AND WHI' E ROCK EGGS for hatching from choice birds; arm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.85. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Weida, Kans.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of bird. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, \$1 for 22; \$2.50. M. Brown's turkey eggs, 11 for \$3.

EGGS FOR SALE—S. C. W. Leghorne, W. Wyandottes, \$1 per 15. W. H. Parkers, \$1.50 per 9. Emdege geese, 20 each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Huntley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minoras cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—My first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$1.50 or 15. S. Perkins, 801 East First street, Newton, Kans.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 2, Hutchinson, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93% to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

WHITE WYANDOTTE COCKERELS, (Stay White); \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Arzt, Farmed, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquiry of Mrs. T. M. Fleming, Fontana, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

SILVER LACED AND WHITE WYANDOTTES \$1 per sitting of 15. Eggs guaranteed. Circular free. R. C. Macaulay, Route 1, Frederick, Kans.

Kansas Chick Feed
For baby chicks, a balanced ration which makes the little fellows healthy, hearty and happy. Price, 25 pounds for \$1. Our Kansas Lice Killer is guaranteed to kill the lice; 5 packages for \$2, prepaid. W. E. Smith, Osborne, Kansas.

chances on that score but dust the birds once each week while sitting and just as often after hatching, until the young turkeys are well feathered and are noticed freely dusting themselves in fresh earth. After this insects will not cause further trouble.

If the turkey should want to sit in an inconvenient place, like the henhouse, I do not molest her for a few days until the incubating instinct is strong and not easily broken up. Then at night, I move her to some place where she will be undisturbed. An unused barn-floor is a good place. There food, grit, and water may be left, allowing her to come off at will. Sprinkle the eggs with warm water the last few days before hatching, and watch to see that the old bird does not leave the nest too soon.

Sometimes the first poult to hatch will fall out of the nest and their peeping may cause her to leave before all are out. In such cases wrap them warmly in flannel and keep by the kitchen fire. No food will be needed the first two or three days. Stale bread-crums squeezed from sweet milk is the best food, gradually getting them into johnnycake by the time they are a week or ten days old. Light feeding will suffice, as there is danger of overfeeding or making them lazy. Once or twice a day lettuce, dandelions, or onion-tops should be cut up and fed with the cake, using one-fourth or one-third in bulk of the green food.

I have never had much luck cooping the young turkeys. If confined only a few days they would lose strength and droop. I now place them on the part of the farm where it is desired they should range, preferably in a pasture, where the grass is short. They are not let out in the mornings when small, until the dew is off unless the grass is very short.

When the turkeys are small the mother will not bring them home, so every afternoon about 5 o'clock, or earlier on cloudy days, I go after them. By waiting too long they will be located for the night and difficult to find unless their roosting place is known. They may usually be found at nearly the same place, since they take much the same route each day.

The automobile is making its way to the ends of the earth. In the upper part of Transkei (Kaffirland) a service of motor cycles has recently been established, ridden by natives, to carry the mails from Mount Frere to the outlying stations, and up on to Kokstadt, a distance of seventy miles.

Make yourselves nests of pleasant thoughts. None of us as yet know what fairy palaces we may build of beautiful thought—proof against all adversity.—Ruskin.

The Great American Hen. The greatest thing in the United States to-day is the hen. Her portrait "rampant" ought to appear on every dollar, half, quarter and dime that Uncle Sam puts out; for the actual fact is "Biddy's" business brings in more of these same dollars, halves, and quarters than any other single—and I might almost say double—American industry. Three hundred million dollars' worth of poultry products is "Biddy's" yearly contribution to the farmers' pocket-book, and if the exact truth were known, a goodly number of those three hundred millions were made by men and women who have studied how to feed the hen.

Such men use good, sound, chicken sense. They begin with young chicks, and follow a consistent system of feeding all through the life of the hen; using with the regular ration, that wonderful discovery of Dr. Hess—Poultry Pan-a-ce-a—which builds healthy flesh, bone, and feathers, and makes early laying a habit. Now let me say right here that Dr. Hess' Poultry Pan-a-ce-a is not a stimulant. Rather, it is a health-giving tonic, which helps the hen to get out of her food all that Nature would otherwise supply.

Poultry Pan-a-ce-a helps the hen to digest her food properly, which in itself gives her health and vigor. It aids assimilation—every grain or particle of food goes where it is most needed, to build bone, flesh, feathers, or to make eggs, so that the greatest possible good is realized in the least possible time.

The saying that "an ounce of prevention is worth a pound of cure" is doubly true in the poultry business. The wise hen man cures his hens before they get sick, and his one certain agent for doing it is Dr. Hess' Poultry Pan-a-ce-a.

Poultry Pan-a-ce-a and Instant Louse Killer are the result of long study and experiment under just such conditions as the farmer meets with in his own yards.

Dr. Hess & Clark, of Ashland, Ohio, are so confident of the good you will get from these preparations that they are willing to give a written guarantee with every package. The cost is so small it's hardly worth considering.

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

POULTRY BREEDERS' DIRECTORY. POULTRY BREEDERS' DIRECTORY.



DON'T SEND EAST for your Single Comb Brown Leghorns. In four shows this year I have won 15 out of 19 blue ribbons competed for, and in three of these shows have had highest scoring bird in the show. Scores as high as 98% by Owen and Atherton and 94% by Rhodes. Stock for sale. Eggs, \$1 for 15; \$6 for 100.

CHAS. C. SMITH, Manhattan, Kansas.

Pure Single Comb Brown Leghorn Eggs—30 for \$1; 100 for \$5. F. P. Flower, Wakefield, Kans.

Cornish Indian Game Eggs. Write L. C. Horst, Newton, Kansas.

Buff Leghorns

S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Ks.

HIGH CLASS POULTRY Silver Wyandotte, White Wyandotte, and White Plymouth Rock Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50, Cockerels, \$2 to \$4. T. F. Wenver. Blue Mound, Kansas.

Eggs for Hatching

M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. M. B. A. Grant, Emporia, Kansas.

Johnnie Chase, Glasco, Kas.

Breeds Black Minoras, S. C. Brown Leghorns and Barred Rocks. Second to none in the state. Eggs, \$2 per sitting.

W. P. ROCKS EXCLUSIVELY. Eggs for hatching 15 for 75 cents; 50 for \$2. MRS. ALICE PERKINS, Munden, Kansas.

BUFF ROCK EGGS

Here they are. Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

Imported S. C. Black Minoras

The world's greatest laying strain. Eggs \$1.50 per 15; \$6 per 100. Send 5 cents for circular. Address George Kern, 817 Osage St., Leavenworth, Kans.

SILVER WYANDOTTES exclusively

Blue ribbon winners at the State Fair and State Poultry Show. Eggs \$2 per 15; \$5 per 45, expressage prepaid. A few good cockerels for sale. W. R. Comstock, Station B, Topeka, Kans.

Eggs For Hatching

WHITE HOLLAND TURKEYS, MAMMOTH, PEKIN DUCKS AND BARRED PLYMOUTH ROCKS. \$1 per setting for any of the above, fresh eggs carefully packed and safe arrival guaranteed. A. F. Huse, Manhattan, Kans.

White Plymouth Rocks

Scoring 95 Scored by Rhodes Eggs from selected pen, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Ida Meier, Route 2 Lincoln, Kansas.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

S. C. Buff Leghorns, S. C. Buff Orpingtons

Jumbo Squab Pigeons (Useful Pigeons)

Our catalog tells prices, prizes and quality. Send for it to-day. W. H. Maxwell, 1220 Quincy, Topeka, Ks.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain). Farm stock eggs from pen scoring 196, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention Kansas Farmer when writing.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR, Glendale Park, Hutchinson, Kans.

Kansas Safety Incubators

Our machine is built on scientific principles and does its work promptly, requiring less attention than any other machine. Send for our catalogue which gives full particulars of our incubators and brooders.

W. E. Smith, Osborne, Ks.

MILLER'S FAMOUS BARRED ROCKS

Every pen headed by a prize winner. First prize cockerel Kansas state show Jan. 1906. First prize cockerel St. Joseph, Mo. Jan. 1906. Second and fifth cockerel Kansas state show 1906. Also won first pen Kansas state fair Sept. 1905. If you want to raise first class stock get a sitting or two of eggs from my pens and you will be pleased with the results. Good hatches guaranteed. Send for descriptive circular. Price \$2 per 15 or 30 for \$3.50. Let me book your orders now. A. H. Miller, Beloit, Kans.

INCUBATOR EGGS

From high grade White Rocks and White Wyandottes.

\$3.00 for 50, \$5.00 per 100

SEND FOR CIRCULAR.

W. L. BATES, Topeka, Kans.

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50.

E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns

EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ-DING, KAN.

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5. Main flock farm range. Hens pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash. Starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co. Wichita, Kansas

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants.

A. H. DUFF, Larned, Kansas

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at.

W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and to them scoring 94 to 96%, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepare expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kans.

BUFF LANGSHANS

13 eggs, White \$2, Black \$2, \$1 and \$1 per 100; Buff Leghorns, Orpingtons, Cochins, S. & D. C. B. and White Leghorns, B. and W. Rocks, W. and S. L. Wyandottes, L. Brahmas, \$1.50 to \$2.00 per 15. Toulouse Geese eggs 20c each. M. B. turkeys, \$1.50 and \$2 per 9 native high-scoring blood

eggs per 100. Imported and in our yards. Mention Kansas Farmer when writing. America's Central Poultry Plant. J. A. Lovette Mullinville, Kans.

STEINMESCH'S CHICKENS

Winners at St. Louis and Portland. Farm raised. 15 varieties. Catalog FREE. Contains "Some Good Suggestions". Write Steinmesch & Co., 812 Market St., St. Louis, Mo.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of THE KANSAS FARMER. Kindly give the age, color, and sex of the animals, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should be signed with full name and should be addressed to the Veterinary Department of THE KANSAS FARMER, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in THE KANSAS FARMER, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in KANSAS FARMER."

Horse with Sore Tongue.—I have a horse with a sore tongue; she began to fall last September, lost her appetite and flesh; she looks pretty well out of her eyes. Her tongue swelled three times the natural size, was red and "furry," with 6 sores around top edge of tongue—one at the end of tongue the size of a quarter, and one at the base the size of a dollar. I can find no one who can give me a remedy. The tongue at present is down to natural size, but she is not doing well. Can you tell what the trouble is, and a cure? J. C. H.

Humboldt, Kans.

Answer.—From the symptoms you give of your horse with a sore tongue would think that the condition came from an irritant of some kind that the animal had eaten, or some foreign substance that had become lodged in the tongue; from the fact that your animal is not doing well at present would advise your getting the following condition powder filled and give in the feed, ground feed being preferable: One ounce of nux vomica, 2 ounces pulverized gentian, 2 ounces pulverized fenugreek, 8 ounces pulverized glycyrrhiza root, 1 ounce pulverized potassium iodide; mix and place in 10 pounds of oil meal; give a heaping teaspoonful night and morning in ground feed.

Horse with Watery Eyes.—I have a horse that has had a running at the eyes for the past two months; they look all right but water all the time. Can you tell me what is the trouble and a remedy? W. F.

Eimdale, Kans.

Answer.—There is probably some inflammation in your horse's eyes; would advise your poulticing the eyes with hot water, as hot as the animal can stand; apply the water to the eye by soaking a large piece of cotton, having the cotton attached to a piece of cheese cloth and tied to the halter; change the poultice as often as it gets cool.

Sore on Gelding—Calves with Ringworm.—I have a light bay gelding, 3 years old, that has a sore 2 inches above the ankle on right hind leg; it is about the size of the end of my finger and extends out so that when I run the curry comb over it it bleeds. Will you please tell me what the sore is, and a remedy?

I also have some calves with spots around their eyes and necks with the hair rubbed off. What is the cause, and what can I do for it? H. A. U.

Rozel, Kans.

Answer.—It is not uncommon for a sore to come on the legs of horses such as you describe, especially if any filth has been allowed to accumulate. Apply the following powder to the sore after it has been washed with clean water to which have been added a few drops of carbolic acid: Iodiform 1 ounce, tannic acid 2 ounces, acetanilid $\frac{1}{2}$ ounce, boracic acid $\frac{1}{2}$ ounce. Mix and place in a dusting box. keep wound covered with this powder. Do not tear the scabs off as they form, but allow them to peel off of their own accord.

The calves evidently have ringworm and I would advise your using a disinfectant, any that will not run into the eye will be desirable. Bathe the areas with a weak solution of one of the common disinfectants, and then apply a preparation of lard and sulfur. A few applications will remedy the trouble.

Weakness in Mare.—I have a large mare 11 years old; she has been bred to a jack every year for seven years. One year she did not have a colt; last year she had a colt which stood and suckled, but when a day old died. This spring she had a colt that was small but lively; he suckled and seemed to be in perfect health. The next morning I found him dead in corner of box stall: no external injuries. I shall not breed her this year. How do you account for it? C. D. A.

Hickmans Mills, Mo.

Answer.—There is evidently some weakness which would be considered constitutional in the case of your mare. Would therefore advise your giving the

animal a course of treatment to build up her condition before raising any more colts. Use one of the condition powders that you have seen recommended in these columns.

Cocked Ankles.—Can a horse that has cocked ankles be cured if taken in time. He only shows signs after a hard drive. J. E. S.

Lakin, Kans.

Answer.—If a horse is properly cared for after a long drive the cocked ankles can be prevented by rubbing and poulticing with antiphlogistine and then bandaging so as to hold the ankles in position.

Mare Out of Condition.—I have a 12-year-old sorrel mare that had distemper for several weeks, and then a bunch came on the small of the back and hips, and in a few days her limbs and breast were swollen so she could hardly move. She has been in this condition for ten days. She has a good deal of fever in her limbs. What can I do for her? M. T.

Traver, Kans.

Answer.—I would advise using a teaspoonful of nitrate of potash in the mare's drinking water night and morning. Apply hot water to the limbs, rubbing them thoroughly for several minutes after using the water, then apply a liniment that will not blister.

Indigestion.—I have a 5-year-old bay mare that breathes as if in pain; she will breathe naturally for a minute or two then inhales and exhales with a grunt. She has been in this condition for a month. I work her all the time on the farm. V. M.

Answer.—The condition you mention with your mare is often brought about by digestive trouble coming on from feeding alfalfa or dusty hay. The remedy is to take away the feed that is causing the trouble and feed very little roughness and considerable grain for a month or more.

Lump on Mare's Jaw—Horses Have Worms, Etc.—I have been using the liniment you prescribed for the lump on my mare's jaw; the lump gets no larger or smaller. The sore is growing larger and discharges a white matter; what would be best to use to clean the sore out?

I also have some young horses that seem to be hide-bound and wormy; they rub a good deal; have had grain all winter but are not doing well.

McPherson. A. R. J.

Answer.—I would advise opening the lump on the mare's cheek, and then heal the wound by the use of some of the common disinfectants which are found on the market. If you have nothing else a half teaspoonful of carbolic acid in a quart of water makes a good disinfectant.

I would advise using oil-meal for the animals that are hide-bound; give them plenty of salt and I think this will rid them of the worms. If it fails to do so, give 1 ounce of turpentine to a dose, six hours apart until you have given 4 doses, while the animals are fasting. It would be best to give the turpentine in half a pint of raw linseed oil.

C. L. BARNES.

Hebrew's Hog Sale.

(Continued from page 463.)

China hogs and has recently added to his herd some of the best blood in the country. If you will notice the accounts of the most prominent sales which have been held during the past year, you will find that Mr. Hebrew's name is among the buyers of the high-priced stuff. Col. John Brennen cried the sale, and the following is a list of the buyers:

T. M. Cooper, Stockton; G. N. Johnston, Stockton; L. L. Marshall, Stockton; J. M. Mellon, Stockton; Jack Dryden, Stockton; Thos. Shaw, Stockton; J. G. Woodrum, Stockton; W. T. Low, Jewell City; C. N. McNulty, Stockton; Jack Shaw, Stockton; W. E. Daniels, Stockton; V. Hollenworth, Stockton; E. G. Davis, Stockton; Richard Marjewell City; C. N. McNulty, Stockton; Ed. Hays, Stockton; O. B. Smith, Cuba; F. Schruber, Stockton; Ed. Hederhorst, Stockton; T. M. Cooper, Stockton; D. W. Cook, Stockton; A. J. Iman, Stockton; A. H. Sanders, Stockton; O. Hazen, Stockton.

Gossip About Stock.

G. H. Ramaker, of Prairie View, Kans., has a fine herd of Duroc-Jersey hogs. His herd was started about four years ago, and he has taken great pains to get good foundation stock. Among his brood sows we found Perfection Girl 98904 by Red Perfection, dam Iowa Girl; Gold Mine 77498 by Missouri Boy; Prairie View 77504 by Missouri Boy; and others equally as good. His herd boar is Journal 2d by Duroc Jim 22829, dam Chandler's Journal 31998. Mr. Ramaker will be an advertiser in this paper later in the season. Watch for it as he will have some bargains.

Volume 64 of the American Short-horn Herd Book is off the press and ready for distribution. It contains the pedigrees of bulls numbered from 242180 to 247190, both inclusive, and the pedigrees of 6857 females. The price of this volume to non-members is \$3.30, postage prepaid. Volume 65 is now in press and entries for Volume 66 have been closed. All names sent in

hereafter will appear in Volume 47 or a later one. Address Secretary John W. Groves, Live Stock Record Building, Chicago, Ill.

Hon. T. A. Hubbard, who is known throughout Kansas as the owner of Rome Park Stock Farm, and who has long been a very active member of the Kansas State Board of Agriculture, still keeps close to the alfalfa roots by raising some of the best hogs in Southern Kansas. Just now he has a nice bunch of Poland-China boars and bred sows for sale. Twenty-five of the boars are ready for service now, though he can furnish pigs if desired. With the blood of Lamplighter Jr. 35311, Medler 39541, Simply O. K. Jr. and Perfection 38771 in his herd he is able to supply the best. He also has some fine Berkshires from Rutger Judge 2d 2'680, Hubbard's Jumbo 85973, Baron 86921 and Royal Dick 88116, who have each found a home at the head of this herd. Mention THE KANSAS FARMER and write for these hogs.

Farming Lands in New Zealand.

The New Zealand Government, knowing they have one of the best agricultural countries in the world and desiring to increase their population by having settle among them, English speaking farmers from America, have entered upon an extensive advertising campaign in this country to show American agriculturists the opportunities they have for bettering their condition in New Zealand.

The country is marvelous in every way, a moderate climate, no extremes of heat or cold. Enormous crops are raised of all such products as are grown in temperate climates. Potatoes, turnips, and mangels are measured by the ton rather than the bushel. Wheat, oats, barley and fruit are produced in immense quantities. It is one of the greatest sheep-raising countries in the world. The dairy exports amount to millions of dollars annually.

Farmers are prosperous everywhere. The New Zealand Government aids and assists them in every way and loans money to settlers at 5 per cent per annum.

The country has less than a million population. There are 276,000 people, or almost one-third the population who have money in the savings banks amounting to \$43,331,000. The country has never had a drought or failure of crops.

The Government has millions of acres of land for sale to farmers. It issues very handsome literature with illustrations of farm lands, stock, etc., and gives a full and accurate account of the country as it is, what lands are worth, etc. This literature is sent free by the Government to any address upon request, and if any of our readers are interested in knowing more of this magnificent country, we suggest they write at once for literature and information to Mr. T. E. Donne, Superintendent Government Department, Wellington, New Zealand. See advertisement on page 476.

Earthquake in Wisconsin.

Kendalls, Wis., April 11.—By special dispatch—The following telegram tells how three separator manufacturers met an earthquake that jarred the ground under their feet.

Kendalls, Wis., April 11.

The Sharples Separator Co., Chicago.

"In the presence of forty dairymen, Tubular won big contest here yesterday, over three competitors. Sold committee six sixes."

Mr. Maire is the traveling representative of the Sharples Separator Co., of West Chester, Pa., Chicago, Ill., and Toronto, Canada, manufacturers of the famous Sharples Tubular Cream-Separator. The Sharples Separator Co. certainly seems to have things about its own way, easily winning all public contests in which it enters its machines. This contest certainly proved an earthquake to the three defeated competitors, as Mr. Maire's telegram says they were not only defeated but that six of the popular number six Tubular Cream-Separators were sold on the spot as a result of this contest.

CHEAPER FARM LAND

SOUTHWEST OFFERS BEST OPPORTUNITIES FOR SECURING HOMES

Many farmers in the Northern and Eastern States are selling their high priced lands and locating in the Southwest. Many who have been unable to own their homes in the older country are buying land in the new country.

Unusual opportunities exist along the lines of the Missouri Pacific-Iron Mountain Route. The rich, alluvial, delta lands and river bottom lands of Southeast Missouri, Eastern Arkansas, Louisiana, and Texas, capable of producing 60 bushels of corn, abale of cotton, 4 to 6 tons of alfalfa, 150 bushels of potatoes, and other grains, vegetables, and hay crops, can be bought for \$7.50@15 per acre. When cleared and slightly improved will rent for \$4@6 per acre cash.

Uplands more rolling, lighter soil, adapted to fruit-growing—peaches, pears, plums, grapes, berries—also melons, tomatoes, and other vegetables, can be bought for \$5@10 per acre in unimproved state. Many places with small clearings and some improvements can be bought very cheap.

This is a fine stock country. No long winter feeding. Free range, pure water, mild climate. A healthy, growing country, with a great future.

Write for map and descriptive literature on Missouri, Arkansas, Louisiana, Texas, Kansas, or Indian Territory. Very cheap rates on first and third Tuesdays of each month.

Address.

C. D. BOYD, T. P. A., Indianapolis, Ind.
or H. C. TOWNSEND, G. P. & T. A., St. Louis, Mo.



KENDALL'S SPAVIN CURE
TRADE MARK.

Time tried. Stands every test. Spavin, Ringbone, Curb, Splint, Lameness, Swellings—all readily yield to the great horse remedy.

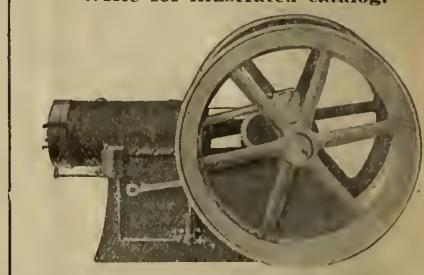
ALWAYS ON HAND.

Dr. B. J. Kendall Co.,
Dear Sirs:—Please send me your Horse Book. Kendall's Spavin Cure is the best liniment I ever used; have used it for three years and always kept it on hand. Respectfully, W. E. Teets.

\$1 a bottle. Six bottles for \$5. Greatest known liniment for family use. All druggists sell it. Accept no substitute. Our great book, "A Treatise on the Horse," free from druggists or
Dr. B. J. Kendall Co., Enosburg Falls, Vt.

The Waterloo Gasoline Engine
A popular engine at the right price.

Also Power and Sweep Feed Grinders
Write for illustrated catalog.



WATERLOO GASOLINE ENGINE CO.
1014 Cedar St., Waterloo, Iowa.

STARK SEEDS best by Test—78 YEARS. We PAY CASE WANT MORE SALESMEN Stark Nursery, Louisiana, Mo.: Huntsville, Ala.

SEEDS That will Grow **PLANTS** That will Bloom
None better, even at the high prices. Special bargains: SEEDS, 10c, 5 pkts. VEGETABLES, 10c, 5 pkts. PLANTS, 6 Roses, 26c; Geraniums, 26c; 6 Begonias, 26c; 4 Polargravines, 26c. My catalog prices will surprise you. Catalog and pocket Royal Giant Peasies free.

A. C. ANDERSON, Columbus, Nebraska.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

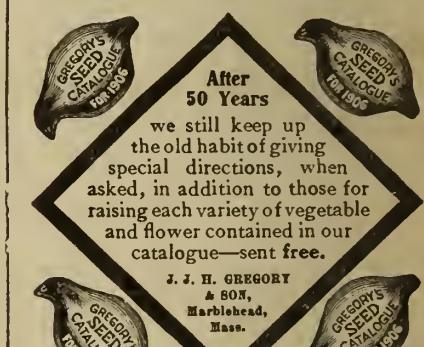
J. C. ANDRAS, Jr.
Manchester, Illinois

World's Premium Seed Corn,

HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri



The farmer's guide to success in farming. A book for actual use in keeping all farm accounts in. A full set of farm and live stock accounts worked out in detail. Any farmer can use it. Every farmer who wants to keep track of his business, should have one of these books.

Price delivered.....	\$3.00
Kansas Farmer, one year.....	1.00

Total..... \$4.00
Both for..... \$2.50

Address
KANSAS FARMER CO., Topeka, Kans.

THE KANSAS FARMER

Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service, for the week ending April 23, 1906, prepared by T. B. Jennings, station director:

CLIMATOLOGICAL DATA FOR THE WEEK.

Temperature. Precipitation
Maximum. Minimum. Mean. Departure from normal. Total. Departure from normal.

WESTERN DIVISION.

	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
Cimarron.	80	39	58	...	0.48	...
Colby.	76	31	55	...	1.50	...
Coolidge.	82	35	55	...	1.38	...
Dodge City.	81	39	56	+1	0.12	-26
Dresden.	77	33	56	...	1.03	...
Englewood.	84	38	56	...	0.55	...
Farnsworth.	84	34	55	...	0.75	...
Jetmore.	88	38	56	...	0.35	...
Lakin.	86	36	56	...	2.00	...
Scott.	80	37	58	...	1.00	...
Wakeeney.	78	36	56	...	0.80	...

MIDDLE DIVISION.

	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
Clay Center.	81	29	58	T	...	...
Concordia.	78	32	59	+3	T	-56
Eldorado.	84	35	58	...	0.00	...
Ellinwood.	84	32	58	...	0.00	...
Hays.	81	34	56	...	0.46	...
Pitts.	80	38	59	...	0.00	...
Republic.	80	28	57	...	0.09	...
Rome.	80	35	55	...	0.01	...
Salina.	84	29	59	...	0.10	...
Wichita.	83	39	61	+3	T	-73
Winfield.	82	42	61	...	0.00	...

EASTERN DIVISION.

	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
Agricultural Col.	86	29	61	...	0.01	...
Burlington.	87	34	61	...	0.00	...
Emporia.	82	33	60	...	0.00	...
Fall River.	86	33	61	...	T	...
Frankfort.	79	28	58	...	0.00	...
Grenola.	85	35	60	...	T	...
Iola.	84	37	62	...	T	...
Kansas City.	82	37	61	+6	0.49	-21
Pittsburg.	87	35	63	...	0.00	...
Pleasanton.	84	32	59	...	0.00	...
Topeka.	82	36	61	+2	0.01	-57

GENERAL CONDITIONS.

The past week has experienced extremes in temperature and precipitation yet the weather has been springlike. The week began with low temperatures over the State, the minimum temperature being 28° in the northern

15th but was seasonable on the other days, reaching a maximum of 82° on the 21st.

LaBette.—The weather was a little cool the first of the week, the temperature falling to 35° on the morning of the 15th, but after that date the maximum temperatures ranged in the seventies each day. There was a light shower on the 20th.

Linn.—The first of the week was cool with a minimum temperature of 32° the morning of the 15th, but it gradually got warmer and a maximum of 84° was registered on Saturday. All the days excepting one were clear.

Lyon.—The nights were a little cool the first of the week but the days were warm and pleasant with maximum temperatures generally in the seventies. Saturday was the warmest day. There was no rain and most of the time it was clear.

Marshall.—Every day was clear and there was no rain. Maximum temperatures ranged in the seventies on all but the first day of the week, and minimum temperatures ranged in the forties on all days except the 15th, when a minimum of 28° was recorded.

Montgomery.—It was cool the first of the week but there were summer temperatures the last of the week. The 19th and 20th were cloudy with a trace of rain on the 20th. Timber belts and orchards are getting green, hedges are leafing, and lilacs are in bloom.

Osage.—There were light showers the first two days of the week with a minimum temperature of 33° Sunday morning, but after that the weather was fair with maximum temperatures in the seventies.

Riley.—It was cold enough on the morning of the 15th to form thin ice but it seems to have done no damage. The days have been warm and pleasant with the nights a trifle cool. Northeasterly winds have generally prevailed.

Shawnee.—This has been a very pleasant week. The first two days were a little below normal in temperature with a light frost the morning of the 15th. The temperature and sunshine for the week were above normal. A light rain fell on the 19th. There were no high winds during the week.

Wilson.—The first four days of the week were warm and pleasant. On Friday there was a very beneficial thunderstorm and .70 of an inch of rain fell. It was a little cool the morning of the 15th but the days were warm.

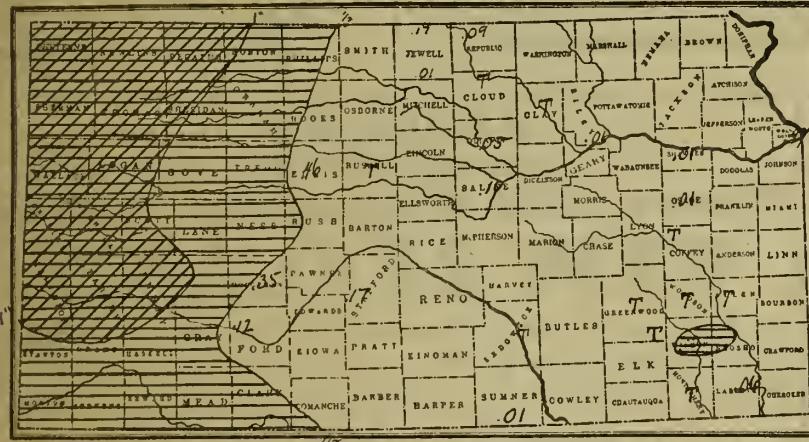
Woodson.—The week has been fair and pleasant with only three partly cloudy days and no cloudy day. The minimum temperature was 33° on the 15th and the maximum was 88° on the 21st.

Wyandotte.—Excepting the first two days which were cool, the temperature was warm and seasonable. A thunderstorm with a fairly good rain occurred on the evening of the 19th and was followed by warm, sunshiny weather the balance of the week.

MIDDLE DIVISION.

Barton.—The week was partly cloudy. There was one cloudy day but no rain. The high-

RAINFALL FOR WEEK ENDING APRIL 21, 1906.



counties east of Phillips County, and 29° in Clay, Riley, and Saline Counties with a light frost extending to the southern line of the State. The temperature rose rapidly for two days, then remained nearly stationary until Saturday when a warm wave crossed the State, giving a maximum of 85°, and a weekly range of temperature for the State of 60°. The precipitation occurred generally on the 19th. In the extreme western counties it began on the 18th and ended on the 19th. Several counties in the middle and eastern divisions report no precipitation, several report a trace. In the Kaw Valley it was light. Fair showers occurred in the western counties of the middle division, with heavy rains generally over the western division—the reports showing the ground to be thoroughly soaked in the western portion of the western division.

CONDITIONS IN DETAIL.

EASTERN DIVISION.

Allen.—The week was warm and pleasant with light winds averaging from 3.8 to 6.6 miles per hour. No precipitation except a trace of rain on the 21st. There was a light fog in the early morning of the 21st.

Anderson.—A warm week with much sunshine. Good growing weather.

Bourbon. Thursday and Friday were cloudy but the rest of the week was clear with reasonable temperatures. The highest temperature was 86° on the 21st. There was no precipitation.

Chase.—The weather has been fair, the only precipitation was .02 of an inch on the 19th. Thursday was cloudy but there was plenty of sunshine the other days. Trees and grass look green again.

Chautauqua.—Very pleasant weather with very few clouds on any day except Tuesday. There was no rain during the week.

Coffey.—Very pleasant week with uniform day temperatures. The lowest temperature was 24° on the 15th and the highest was 87° on the 21st. There was no rainfall.

Crawford.—Fine growing weather since Monday. Only a few scattered showers. Thursday and Friday were cloudy but the rest of the week was clear.

Elk.—There was a light frost on the 15th but it did no damage. Good weather has prevailed all week with very light showers on the 17th and 20th.

Greenwood.—A warm, pleasant, sunny week. There was no rain except a light shower on the 17th. The highest temperature was 85° on the 21st and the lowest was 24° on the 15th.

Jefferson.—A light frost was observed on the morning of the 15th. It was a good week for outdoor work. There was no rain and there was plenty of sunshine.

Johnson.—The weather has been fine. It was partly cloudy Thursday but the other days were clear. The temperature fell to 31° on the

lowest 34° on the 15th. The 17th was windy.

Butler.—This has been a pleasant week with reasonable temperatures. The coolest weather was the first of the week with a minimum of 35° on the 15th, but it gradually warmed up and a maximum of 84° was recorded on the 21st.

Clay.—There was a light frost on the morning of the 15th with a minimum temperature of 29°, but the balance of the week was warm and pleasant. The only precipitation was a light shower on the 17th.

Cloud.—The first two days of the week were cool but the remainder of the week was from 2° to 9° above the seasonal average. The sunshine was 49 per cent of the possible amount.

Harvey.—There was a trace of rain on the 19th.

Cowley.—This has been a dry week with two days cloudy and one partly cloudy. The temperatures were very uniform, the maximums ranging in the seventies on all but the last day and the minimums generally being in the forties and fifties.

Ellis.—The first of the week was cloudy and a little cool. On the 19th, .26 of an inch of rain fell. The last two days were clear and warm.

Elliott.—The minimum on the morning of the 15th was 32° but there was a gradual warming up after that and summer temperatures prevailed the last two days. The highest temperature recorded was 87° on the 20th. There was no rain.

Jewell.—Seasonable temperatures prevailed with light showers on the 15th, 16th, and 19th. The lowest temperature was 28° on the 15th, after that the maximums generally ranged in the seventies.

McPherson.—There were no rains. The weather was cloudy except the last three days. There were no frosts.

Ottawa.—The weather has generally been clear and reasonable with light showers on the 15th and 16th.

Pratt.—The weather has been very uniform and pleasant, but it was windy on the 15th and 17th. The lowest temperature was 38° on the 15th, and the highest was 80° on the 21st.

Reno.—The week was rainless. The middle part was partly cloudy to cloudy but the fore part and latter part were clear. Maximum temperatures generally ranged in the seventies.

Republic.—There were light showers on the 16th and 18th, and the 19th was cloudy but the rest of the week was clear and the weather was reasonable.

Russell.—There was a trace of rain on Friday. It was a little cool the morning of the 15th with a minimum of 34° but summer temperatures prevailed the last of the week. The maximum temperature was 82° on the 21st.

Sedgewick.—The weather was clear on the morning of the 15th with a temperature of 29°. Seasonable temperatures prevailed the balance of the week. There was a trace of

rain on the 15th and a light shower on the 20th but none on the other days.

Sedgewick.—Light frost was observed on the morning of the 15th. The temperature was below normal the first three days and above the last four. With the exception of a trace of rain on the 15th the week was without precipitation. The weather was clear on the 15th, becoming partly cloudy on the 16th and clear again on the 20th.

St. Francis.—Seasonable temperatures prevailed after the 15th, which was a little cool. .17 of an inch of rain fell on the 20th but none on the other days.

Sumner.—A light frost occurred on the 15th but the week was warm and pleasant with only .01 of an inch of rain. The highest temperature was 80° on the 21st and the lowest, 35° on the 15th.

WESTERN DIVISION.

Clark.—The weather has been unusually favorable with rain on only one day, and seasonable temperatures.

Decatur.—There was a trace of rain on the 15th and a heavy rain of 1.03 inches on the 19th. The rest of the week was clear. Temperatures were generally seasonable except that it was a little cool on the 15th and 19th.

Finney.—The weather was generally warm with a rainfall of 1.40 inches on Thursday. The ground is now thoroughly soaked.

Ford.—The 16th, 17th, and 19th were below the normal temperature, and the other days were above the normal. There were light showers on the 15th, 16th, 18th, 19th, and 20th. The sunshine for the week was 68 per cent of the possible amount.

Gove.—It was a fine week with a moderately heavy shower on the 19th. The highest temperature was 78° on the 18th and the lowest was 41° on the 20th.

Grant.—There was rain on the 19th and 20th. The only clear day was the 18th.

Gray.—Showers fell on the 16th, 19, and 20th. All the days up to the 21st were cloudy or partly cloudy. The maximum temperature was 80° on the 21st, and the minimum was 30° on the 15th.

Hamilton.—Showers fell on the 17th, 18th, and 19th. The 17th, 18, 20th, and 21st were warm but the other days were a little cool.

Hodgeman.—There was .35 of an inch of rain fell on the 19th but none on the other days. Maximum temperatures ranged in the sixties or seventies and minimum temperatures generally in the forties.

Kearny.—A heavy rain fell on the 19th and a moderate shower on the 20th. The temperature fell to the forties at nights and rose to about seventy each day.

Lane.—The 16th and 17th were partly cloudy with considerable wind. On the 19th a fine rain fell. The 20th was clear and warm.

Scott.—An inch of rain fell on the 19th and a trace on the 20th. The highest temperature was 80° on the 21st and the lowest was 37° on the morning of the 20th. On the other mornings the minimum recorded was in the forties.

Thomas.—On Wednesday and Thursday a total of an inch and a half of rain fell. Friday and Saturday were beautiful spring days.

Trego.—A good shower fell on the 19th which was a rather cool, cloudy day. Maximum temperatures generally ranged in the seventies the rest of the week. The minimum did not fall below 40° after the 15th.

Grain in Kansas City.

Receipts of wheat in Kansas City today were 73 cars; Saturday's inspections were 34 cars. Offerings were large. A few early sales of milling wheat were at unchanged prices. The general demand was poor, and average prices were 1/2@1c lower. The sales were: No. 2 hard, 1 car fancy yellow \$3c, 2 cars 81 1/2c, 1 car turkey yellow 81c, 4 cars 81c, 5 cars yellow 81c, 3 cars 80 1/2c, 7 cars 80c, 3 cars 79 1/2c, No. 3 hard, 1 car turkey 81c, 1 car 78 1/2c, 1 car 78c, 7 cars 77c, 5 cars 76c, 6 cars 75c; No. 4 hard, 1 car 75c, 4 cars 72c, 3 cars 71c, 2 cars 70c, 1 car 68c, 1 car 67c, 1 car 66c, 1 car 65c; rejected hard, 1 car 65c, 5 cars 62c; No. 2 red, 1 car 91c; No. 3 red, 1 car 87c; No. 4 red, 1 car 86c; No. 2 mixed, 2 cars 88c; No. 4 mixed, 2 cars 65c.

Receipts of corn were 60 cars; Saturday's inspections were 37 cars. There was an increased supply, but the demand was good.

Prices were unchanged to 1/2c lower, as follows: No. 2 white, 1 car 48 1/2c, 3 cars 48c; No

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
Kansas Farmer Co.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line or seven words per week. Cash with the order.

Electrons must have metal base.

Objecting advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kans.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE CHEAP—One good red registered Shorthorn bull. Kind and gentle. Address J. E. Williams, Fairmount, Kans.

REGISTERED HOLSTEINS and Jerseys of best milk and butter families. Youngsters at reasonable prices. Burton & Burton, Topeka, Kans.

HOLSTEINS—Young bulls 7 and 11 months old, good ones. H. B. Cowles, Topeka, Kans.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts-burn 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

FOR SALE—A fine red Shorthorn bull yearling January 7th. Sire Manipulator by Imported Tilly-Cairn, out of cow by Gallant Knight, dam Bryan's red Rose, a fine milker. She is now sucking calf six weeks old and we take a gallon of milk from her per day. Willis E. Vincent, Hutchinson, Kans.

FOR SALE Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

RED SHORTHORN BULL for sale. A. C. Raitt, R. R. 4, Junction City, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D. 1, Tecumseh, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kans.

PURE SCOTCH BULLS—A Butterfly, a Love-lady and my herd bull. Cows and heifers. Prices right. Geo. W. Wright, Windom, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGRIED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruikshank hull, Violet Prince No. 145847. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); granddams held Island butter record 3 years. Sire's dam holds public milk record of 53 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bidg., Kansas City, Mo.

FOR SALE Five pure-bred yearling Short-horn bulls. Will be pedigreed in name of buyer; sired by Teddy Roosevelt 196274. Good, useful bulls at living prices. Henry Haub, Whiting, Kans.

SEEDS AND PLANTS.

NICE RE-CLEANED ALFALFA SEED FOR SALE. Guaranteed pure; \$8 per bushel. H. L. Heaton, Oberlin, Kans.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SEED CORN—Finch's pure-bred Silver King; white. \$1.25 per bushel, ear or shelled. Address J. H. Glotfelter, Emporia, Kans.

PLANTS FOR SALE—Cabbage, Early Jersey Wakefield, Henderson's Early Summer, Succession 30 cents per 100, \$2.50 per 1,000. Tomatoes, Early, Dwarf Champion, Beauty, Stone, Matchless, 30 cents per 100; \$2.50 per 1,000. Sweet Potatoes, Yellow Jersey, Yellow Nansenmond, 20 cents per 100; \$1.50 per 1,000. Red Bermuda, Black Spanish, Southern Queen, Vineless 25 cents per 100; \$2 per 1,000. F. P. Rude & Son, Box 671, North Topeka, Ind. Phone 4003.

HORSES AND MULES.

FOR SALE—A good black heavy-boned jack. Price, \$250 if sold soon. Do not write but come and see. I also have others for sale cheap. Address Joseph Pitzinger, Box 14, Olmitz, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 6 draft stallions, 20 coach stallions and 40 jacks at one-half the regular price. Write for bargains.

FOR SALE OR TRADE—I have a large, black, 7-year-old jack that is a good foal-getter, which I will trade for a bunch of cattle or sell for money. Address H. J. Stevens, Wellington, Kans.

FOR SALE CHEAP—Fine young trotting-bred stallion, by Flood Wilkes. J. E. Breckbill, Detroit, Kans.

FOR SALE—at reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Poter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howald, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. W. Gillard, 836 Highland Ave., Topeka, Kans.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire hogs that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

AGENTS WANTED.

WANTED—A hustling agent in every community for the best paying preparation ever offered. Ginsu Chemical Company, Wichita, Kans.

HELP WANTED.

WANTED AT ONCE—A man to work on the farm by month. Good wages to the right man. F. M. Gordon, Eudora, Kans.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

MISCELLANEOUS.

DISCRIBE YOUR WANTS—We submit them to our customers free. Mutual Benefiten, Omega, Oklahoma.

VALUABLE Receipts for removing Freckles, Smallpox Pits; also Liquor Cure. All three, 25c. WARD ECKLER CO., Box 271, Davison, Mich.

NOTICE—My application for a permit to sell intoxicating liquors, according to law at 115 E. 5th St., in the 2d ward of the City of Topeka, is now on file in the office of the Probate Judge of Shawnee Co., Kansas. The hearing of the same is set for May 26, 1906, at 9 o'clock a. m. C. R. Hoyt.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; sc 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

FOR SALE OR TRADE—The best liver stable in Topeka, from 21 to 27 boarders, will invoice over \$2,000. \$1,800 cash takes it or will trade for country store. Ill health reason for selling. Address W. R. Falkner & Co., 109 West 7th St., Topeka, Kans.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kans.

GOOD POSITIONS as salesmen now open in every state. Experience unnecessary if a hustler. Steady work, good pay and promotion. Apply at once to Morotock Tobacco Works, Box D 61, Danville, Va.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamp or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½ x 5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

ENSILAGE CUTTER—For sale a nearly new Silage cutter, self feed, 10 ton capacity per hour. Will sell at a bargain. Address E. W. Adams Berryton, Kans. Topeka Independent phone 592

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; Instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 to as high as \$155.50 per month. Wanted 400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago Ill.

FOR SALE Five pure-bred yearling Short-horn bulls. Will be pedigreed in name of buyer; sired by Teddy Roosevelt 196274. Good, useful bulls at living prices. Henry Haub, Whiting, Kans.

SEEDS AND PLANTS.

NICE RE-CLEANED ALFALFA SEED FOR SALE. Guaranteed pure; \$8 per bushel. H. L. Heaton, Oberlin, Kans.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SEED CORN—Finch's pure-bred Silver King; white. \$1.25 per bushel, ear or shelled. Address J. H. Glotfelter, Emporia, Kans.

KANSAS FARMER Fifteen Months for \$1.00 Thirteen Weeks FREE

REAL ESTATE.

REAL ESTATE.

Get a Home IN THE Great Wheat Belt OF KANSAS

The best and most productive land on earth, where the wheat crop of two seasons often brings the farmer more money than the entire cost of his land. Without a doubt the Wheat Belt of Kansas offers the best opportunities open to the farmer today to get good land for a very little money.

CHEAP RATES to HOMESEEKERS Over the Mo. Pacific Railway

Write for rates, complete information of the Great Wheat Belt and a fine colored map of Kansas FREE. Address all communications direct to

A. H. Goddard

Immigration Agent

ALTON, KAN.

FARMERS!

There's Land Waiting For YOU In NEW ZEALAND

The Paradise of the Pacific; Sixteen Days Steam from San Francisco

THERE IS ROOM FOR THOUSANDS OF SETTLERS

Rich Soil. Abundance of Water. No Droughts. No Snow-bound Winters. Mild and Equable Climate. A Land of Peace and Plenty. New Zealand's WEALTH Per Head of Population Is the Highest in the World.

ITS DEATH RATE IS THE LOWEST IN THE WORLD.

Government land is obtainable on easy terms, perpetual leasehold or freehold. Government assistance to new settlers. State loans to farmers at low rate of interest.

New Zealand is a magnificent dairyland meat-raising, lumber and wool-growing country. Last year the produce of the farms of New Zealand totaled a value of one hundred million dollars. New Zealand's butter, wool and frozen mutton fetch the highest prices in the world's markets.

New Zealand Railways are owned by the Government. Cheap freight and passenger rates. Government and Municipal ownership of public utilities. Government Trust Offices, Insurance, Savings Banks, etc.; Government Sanatoria and Hot Mineral Water Spas.

New Zealand is a region of grand and novel scenery. It is largely visited by American tourists who escape the rigors of winter.

A land of splendid sport. Trout-fishing and Deer-stalking. Thousands of miles of angling waters carrying the biggest trout in the world.

It is SUMMER in New Zealand when WINTER in America. New Zealand's summer is cool and enjoyable for traveling. Comfortable hotels. Good Transportation. Cheap rates.

YOU WILL FIND OUT ALL ABOUT NEW ZEALAND

by dropping a postcard to T. E. DONNE, Superintendent, Govt. of Tourist and H. M. Mail Steamers from San Fran to New Zealand Every Three Weeks.

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; bromegrass; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

Illustrated, 5x7 inches, 248 pages. Cloth, Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA.

KANSAS

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

Crimson Wonder 38755 Herd

Will have something fine to offer. Can furnish trios not akins sired by Crimson Wonder 38755 and Kerr's Champion 2355.

Mr. & Mrs. Henry Shrader, Waukon, Ia.

Orchard Hill Herd of Duroc-Jerseys.

Some fine summer and fall males for sale. Summer gilts are being bred.

R. F. NORTON & SON, Clay Center, Kans.

Fairview Herds, Duroc and Red Polled

A few spring boars and Red Polled Bull Calves for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

Egypt Valley Duros

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six time gilts bred to Lora's Lad to farrow in April; will also sell some tried gilts. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

Square Deal Stock Farm

Wm. D. Calder, Prop., Bancroft, Kans.

We have for sale at \$20 each, two Poland-China boars, sired by Square Deal 36749 by Highland Chief Jr. 29364, dam Daisy Calder (87343) by Calders Perfection (33581).

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried gilts. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER, Frankfort, Kansas.

Highland Herd of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

STEELE'S DUROCS

I have eight boars of December farrow, weighing about 75 or 80 pounds, that are by Paul Wonder 26235, by Oom Paul II 17679. This is a good herd boar material, and the price is right. I shall have for future delivery boars by Steele's Model 107654 by Chief Orion 28817, and a few by Paul Wonder. Please write me your wants.

C. G. STEELE, Barnes, Kansas

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.

We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description.

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

Axlines

Poland-Chinas and Barred Plymouth Rocks

Eggs \$1 per sitting. Choice fall pigs, either sex.

E. E. AXLINE Oak Grove Missouri

John Bollin Route 5
Leavenworth, Kansas

Breeds and sells popular... Poland-Chinas

The State and World's Fair winning boars Nemo L's Duke and The Picket in service. Bred sows and serviceable boars for sale.

Oak Grove POLAND-CHINAS...

Nemo L's Duke, prize-winner and sire of winners and Sir Darkness out of Darkness and by Chief Perfection 2d in service. A few boars for sale.

Gus Aaron,
Route 5 - Leavenworth, Kansas

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....</

Shorthorns

M. C. VANSELL Muscotah, Kansas
Breeder of Scotch and Scotch Topped Shorthorns, choice Poland-Chil-
lens and Barred Plymouth Rock Chickens. For sale a pure Scotch bull. Order eggs now at 75 cents per 15.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by
L. A. MEAD,
Kingdown, Ford County, Kansas
For Sale—Bulls and females. Inspection invited.

Ashcraft
Shorthorn Herd

The Scotch Victoria bull Scottish Minstrel
234970 at head of herd.

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldfinch, full sister to the champion Lavender Viscount in service. Cruelshank and Cruelshank-topped straws.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds

of Shorthorns and Berkshires
Baron Rupert 242827 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72683 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall boars and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. Yates Center, Kans.

Horses and Mules**Do You Want to Buy a Jack?**

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

REGISTERED BLACK MAMMOTH
and CATALONIAN JACKS, SADDLE and TROTTING HORSES
The best in the state and at a low price. Come, or write for prices on what you want.
G. A. FEWEL
Leeton, Johnson Co., Mo.

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 16 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to registry, weight about 1,700 pounds
4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young jacks, Spanish Mammoth breeding. Will exchange stallions or jacks or trade for other stock. This stock is all perfectly sound and good breeders.
T. H. TERRY, - Bayview, Kansas

**DO YOU WANT
GOOD READING**

The yearly subscription price of the following magazines is as follows:
Review of Reviews.....\$2.00
The Cosmopolitan.....1.00
Woman's Home Companion....1.00
Kansas Farmer.....1.00

Total\$6.00
We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

KANSAS FARMER CO.,
TOPEKA, KANSAS.

Holsteins

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS
Young Bulls and a few young Cows
and Heifers for sale.

Auctioneers**Col. T. E. Gordon****Live-Stock Auctioneer**

Waterville, - Kansas

Reference: Those for whom I have sold.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.



L. R. Brady
Auctioneer
Manhattan, Kansas

Fine stock sales a specialty
All Herd Books. Catalogues compiled. Sale
tent free.

Z. S. BRANSON
Live Stock Auctioneer

Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values
Terms reasonable. Inquiries cheerfully answered.

John Daum Nortonville, Kansas**Live Stock Auctioneer**

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

R. L. HARRIMAN**AUCTIONEER**

Bunceton, Mo.



First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

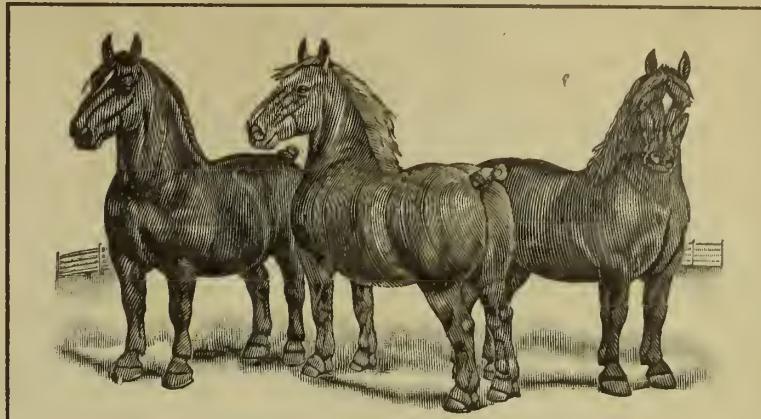
Live Stock Auctioneer
MARSHALL, - MISSOURI



Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

Horses and Mules**The Lincoln Importing Horse Com'y**

Lincoln, Nebraska



We still have a grand lot of PERCHERON, BELGIAN, ENGLISH SHIRE and GERMAN COACH stallions on hand, and for the next FORTY DAYS will make a 15 PER CENT DISCOUNT. Come quick. Remember these stallions must and will be sold within forty days. Write at once for catalogue or take the first train that will land you in Lincoln, where you take the state farm street car, which brings you direct to our barn doors.

A. L. Sullivan, Mgr.

200 HEAD**Imported German Coach, Percheron and Belgian Stallions on Hand.**

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.**REGISTERED PERCHERONS.**

Coachers, Saddlers, Big Mammoth Jacks and Jennets. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, Westphalia, Kansas.

CHEYENNE VALLEY STOCK FARM PERCHERONS**Patsy and Keota Scoggan**

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

ELDORADO STOCK FARM

A choice lot of imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

The Kansas Farmer...

The Greatest and Best Advertising Medium for Reaching the Farmers of the Middle West, of

TOPEKA,

KANSAS

GEO. ALLEN'S STRAIGHT CRUICKSHANK SHORTHORN SALE

At Sale Pavilion, South Omaha, Nebraska, Tuesday, May 1, 1906

I will consign at public auction four head of pure Cruickshank and Scotch Shorthorns of my own breeding, of which twenty-seven are cows and heifers from one to four years old, and fourteen bulls from twelve months to three years old, representing such choice Cruickshank families as Victorias, Lavenders, Seereis, Barmponts, Butterflies Acanthus, Village Princesses, Matchlesses of Mall Valley, Misses and Nonpareils and one pure GRAND DUCHESS cow without an antler. Note the breeding of a few of those in the sale:

No. 8. BARMPTON DUKE 2d. Bull.

Red Roan, bred by George Allen, Lexington, Neb., calved Nov. 30, 1904.

Got by Godwin 115676.....W. A. Harris
Barmpont Princess.....W. Nichoas..Golden Aberdeen 119403.....C. S. Barciay
Barmpont Leaf 2d.....W. Nichoas..Field Officer 97964.....A. Cruickshank
Imp. Barmpont Leaf.....A. Cruickshank..Cumberland 50626.....A. Cruickshank
Barmpont Spray.....A. Cruickshank..Caesar Augustus (25704).....A. Cruickshank

No. 14. LUCKY BOY. Bull.

Red Roan, bred by Geo. Allen, Lexington, Neb., calved Sept. 14, 1904.

Got by Godwin 115676.....W. A. Harris
Sarepta 3d.....J. Cotttingham..Imp. Ambassador 93946.....A. Cruickshank
Sarepta.....W. A. Harris..Golden Drops Hillhurst 39120.....W. E. Simms
Imp. Sorrel.....A. Cruickshank..Roan Gauntlet (35284).....A. Cruickshank
Surname.....A. Cruickshank..Pride of the Isles (35072).....A. Cruickshank
Surmisse.....A. Cruickshank..Champion of England (17526).....A. Cruickshank
Superb.A. Cruickshank..The Czar (20947).....A. Cruickshank

No. 17. ALLEN'S SAREPTA 4th. Cow.

Red, bred by Geo. Allen, Lexington, Neb., calved June 9, 1902.
Got by Godwin 115676.....W. A. Harris
Sarepta 3d.J. Cotttingham..Imp. Ambassador 95946.....A. Cruickshank
Sarepta.....W. A. Harris..Golden Drops Hillhurst 39120.....W. E. Simms
Imp. Sorrel.....A. Cruickshank..Roan Gauntlet (35284).....A. Cruickshank
Surname.....A. Cruickshank..Pride of the Isles (35072).....A. Cruickshank
Surmisse.....A. Cruickshank..Champion of England (17526).....A. Cruickshank
Superb.A. Cruickshank..The Czar (20947).....A. Cruickshank

No. 29. MATCHLESS LADY 3d. Cow.

Red, bred by Geo. Allen, Lexington, Neb., calved July 13, 1904.

Got by Godwin 115676.....W. A. Harris
Matchless 6th of M. V.C. Jordan..Golden Crown 93258.....J. I. Davidson
Matchless 3d of M. V.C. Jordan..Anchorage 90241.....A. Cruickshank
Matchless 2d of M. V.C. Jordan..Confessor 65542.....A. Cruickshank
Matchless of M. V.C. Jordan..Royal Barnington 94949.....A. Cruickshank
Matchless 18th.....J. Davidson..Statesman 15539.....A. Campbell
Imp. Matchless 16th.....A. Cruickshank..Senator (27441).....A. Cruickshank

In selecting the foundation of my herd I was careful to get the best Cruickshank breeding and individuals to be found, and they cost me from \$500 to \$1000 each. This consignment is made up of choice young animals, many of which I would have preferred to keep, but it being my first sale in the West, I desired to make it an attractive one. All cows and heifers old enough for service will be safe in calf, or have calf at side by the Scotch bulls whose pedigrees will appear in the catalog, which will be sent on application. Breeding lists furnished at time of sale. This will be a good time to get choice show cattle and herd-headers.

Col. Geo. P. Bellows } Auctioneers
Col. T. C. Callahan }
H. E. Heath, Clerk, Omaha

GEO. ALLEN, Lexington, Neb.

EVERGREEN STOCK FARM

DARLING BROTHERS, Proprietors, Nellie, Ohio

Will Sell at Public Auction at

Mankato, Kansas, May 5, 1906

20 Head of Scotch-Topped Shorthorn Cattle

For catalogue apply to

C. DARLING, Randall, Kansas and COL. JOHN BRENNEN, Auctioneer, Esbon, Kansas

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

THE AMERICAN QUEEN NEW YORK A SPLENDID HOUSEHOLD MAGAZINE



THE AMERICAN QUEEN is a splendid household monthly magazine, size of The Ladies' Home Journal, twenty to twenty-four pages each issue, beautifully illustrated and printed on good paper, not a new magazine, but an established publication in its tenth successful year, giving invaluable Fashion articles and ideas, Dressmaking hints and practical helpful suggestions, Floriculture, Money-making Ideas, Beauty and Medical Hints and questions on these subjects answered by celebrated specialists. Physical Culture, Animals, Building Plans and Ideas, Beautifying Homes, Splendid Stories, Brilliant Humor, Entertainments for Church, Home and Societies, Fancy Work, Cooking, Money-saving Ideas and other interesting features. Up to date, reliable and helpful.

OUR SPECIAL OFFER

We will send the American Queen, the Kansas Farmer and your choice of any one of the following five magazines for one year, viz:

COSMOPOLITAN MAGAZINE.....

PEARSON'S MAGAZINE

NATIONAL MAGAZINE

AMERICAN BOY OR.....

PHYSICAL CULTURE MAGAZINE.....

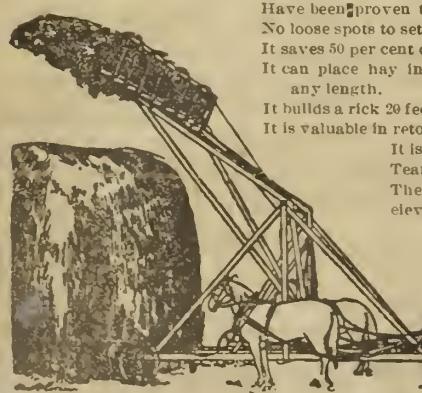
FOR \$1.60

Address

KANSAS FARMER COMPANY

TOPEKA, KANS.

THE JAYHAWK STACKERS AND RAKES



Have been proven the best by test.
No loose spots to settle, take water and spoil.
It saves 50 per cent of the labor on the stack.
It can place hay in any spot on a rick of any length.
It builds a rick 20 feet high.
It is valuable in retopping.

It is a good wagon loader. It has only 18 foot of rope. Team only travels twice as far as the load is raised. The load can be carried and dumped at any point of elevation. It is a great labor saver.

We also manufacture two patterns of

Sweep Rakes

We Ship Responsible Parties on Trial

Give us a chance to do so by letting us know your wants.

YOURS FOR A SQUARE DEAL

The F. Wyatt Mfg. Co., Salina, Kas.

Mention Kansas Farmer.

630,5
KAF

UNIVERSITY OF ILLINOIS



Volume XLIV. Number 18

TOPEKA, KANSAS, MAY 3, 1906

Established 1863. \$1 a Year

BOUNDARY LINES OF FARMS.

EDITOR KANSAS FARMER:—Several interested parties would be pleased to get information about boundary lines of farms. Twenty-six years ago A and B each purchased adjoining quarter sections of land and set their hedge rows on the line between them, according to the corner stones of the Government survey, and have regarded this hedge row as the dividing line between them for the past twenty-seven years. The Government corner stones have since been lost.

Two neighbors who own land on the opposite side of the road from A and B disagree in regard to the location of the boundary line between their farms and call on the county surveyor to survey the land. The county surveyor sends out notices to sixteen farmers, residents of four sections of land where the lines are in dispute, and tells them that their lines and corners will be affected by this survey. Only two men, of the sixteen property-owners, desire this survey; the others are all satisfied with the lines and corners as they are.

Can A and B's line be changed by this survey? Must all these farmers help pay for a survey they do not want and is only called for by these two men who are unable to agree?

Marion County. S. A.

It will be well for the parties interested in this matter to read carefully chapter 29 of the General Statutes of Kansas. Section 7 of said chapter provides that any party or parties having a survey to make in which another party or parties are interested, shall notify the county surveyor, who shall notify such interested party or parties and that such notified parties shall pay their proportionate part of the expense of a survey by the county surveyor. If it seem unjust that any owner of land should be thus empowered to order a survey with attendant costs upon the lands of his neighbors, it must be remembered that an official survey is a legal proceeding. As in bringing a law suit a person may place others under needless expense, so in causing a survey to be made a cranky person may create costs that ought not to be created. Section 31 of the chapter mentioned provides that the county surveyor shall apportion the costs among the several parties interested. In the cases that have gone to the Supreme Court these sections of the law have been considered conclusive as to costs.

That the line which was established according to the original Government survey markings and has been recognized for twenty-seven years should continue to be the line, there is no doubt. Any survey which disturbs such line would be promptly set aside if the case were taken into court. On this point Judge Cooley on Boundary Lines, quoted by Chief Justice Horton in 28 K. 665, says: "To bring these lines into discredit when people concerned have not questioned them, not only breeds trouble in the neighborhood, but it must often subject the surveyor himself to annoyance and discredit, since in legal controversy the law, as well as common sense, must declare that a supposed boundary line long acquiesced in, is better evidence of where the real line should be than any survey made after the original monuments have disappeared. . . . It is merely idle to direct a surveyor to locate or establish a corner as the place of the original monument according to some inflexible rule, however erroneous may have been the original survey. The monuments that were set nevertheless govern, even though the effect be to make one-half of a

quarter-section of land ninety acres and the adjoining one seventy acres, for parties buy, or suppose they buy, in reference to these lines, and no more, be it more or less."

Sections 27-30, chapter 29, provide that any interested party may appeal from the finding of the county surveyor to the district court. The appeal must be taken within thirty days. If appeal be taken, it will doubtless be necessary to employ an attorney, so that it is not necessary that the procedure on appeal be described here.

It is proper to call the attention of the county surveyor to the facts and the evidence as to the location of the Government survey, and to urge that this line be left unchanged. Indeed it will do no harm to call the county surveyor's attention to THE KANSAS FARMER's discussion of the subject, for, though he is doubtless conversant with the law and the decisions of the courts, he may like to refresh his memory thereon.

DAMAGES ON ACCOUNT OF ROADS.

EDITOR KANSAS FARMER:—Please inform me through the columns of THE KANSAS FARMER whether a man must give the required amount of land for a public road, on a section line, or whether he can collect pay for it, or in other words can he sell it to the State?

If a road is being opened through his land, compelling him to move fences, or build new ones, can he hold the township for the expense of doing this work? NIC. SUHLER.

Kingman County.

The subject of "Roads and Highways" is treated in chapter 154, General Statutes of Kansas. The owner of land over which a road is proposed is entitled to compensation for the land taken for public use, or rather for the easement by which the public acquires the right to the use of the land for the purposes of a highway. In several counties of Kansas all section lines have been declared public highways by special enactments. The Supreme Court, 53 K. 655, sustained the constitutionality of such acts on the ground that "a proper tribunal is constituted by the provisions of the act, so that the land-owners can claim and receive damages for the land taken for highways."

Section 3 of chapter 154 provides for a hearing as to damages sustained by any person. Our correspondent should ask his township trustee or a justice of the peace to allow him to examine said chapter 154, and he should read carefully sections 3, 4, 5, and 8, and the brief statements of decisions of the Supreme Court thereon. He will observe that it is necessary to present his claim for damages to the road viewers, and to present it at the proper time.

A HARDY BERMUDA GRASS.

The Oklahoma Experiment Station has again rendered valuable service to the farmers of the Territory by discovering and propagating a variety of hardy Bermuda grass. Bermuda grass grown from seed either winterkills, or is so greatly injured by the Oklahoma winters that it is very unsatisfactory. But by close observation at the experiment station, it was learned that in some of the plats sown as long ago as 1892 there was to be found a hardy variety which endured the winters well, started early in the spring, and yielded abundantly for pasture and satisfactorily for hay. This grass yields no seed in Oklahoma, so that it has not been possible to reproduce the hardy variety from seed. It is easily propa-

gated from sod, however, and this method is reported to be reasonable in cost.

The station has distributed trial lots of this hardy grass sod to all parts of Oklahoma and has received favorable reports from every county but one. It has endured a temperature of 18° below zero without injury.

For preventing washes and for filling old washes Bermuda grass excels. It endures overflow, having been submerged for three weeks and kept on growing. "Eighteen inches of tough clay have been tamped down on an established sod of Bermuda grass, and in six weeks, the grass made its way through and formed a sod on top," says a bulletin from the Oklahoma Station. "Strips of Bermuda sod have been placed four feet apart across gullies by the roadside, and within two years, it was necessary to plow out a gutter to furnish a place for the water to run. Ditches in cultivated fields, so deep as to be impassable for farm machinery, have been filled in one season by the dirt caught by Bermuda grass planted in the hard soil in the bottom of the ditch."

As a lawn grass Bermuda grass is about the only thing that is satisfactory south of the Kansas line.

Possibly Bermuda grass may be adapted to the climate of Kansas by the method pursued in finding a variety adapted to Oklahoma. The chance of such a find is well worth a search.

RESPONSIBILITY FOR DAMAGES BY FIRE.

EDITOR KANSAS FARMER:—I would like to inquire whether a man is responsible for damages done by his setting fire on his own farm, and it crosses over to his neighbor's land, and burns up three hundred grapevines, an acre of strawberry plants, some blackberry vines, etc. He owns eighty acres of land. Can he be made to pay the damage? Would it be a State case?

Johnson County. J. L.

Section 416 of Chapter 100, General Statutes of Kansas, reads as follows: "If any person shall set on fire any woods, marshes, or prairies so as thereby to occasion damage to any other person, he shall be liable to the party injured for the full amount of such damage, to be recovered by civil action."

Several cases under this statute have gone to the Supreme Court. In discussing them the court has inclined to a strict construction of the statute. Much importance has been attached to the words "woods, marshes, or prairies." The general tenor of the decisions is to the effect that a person has a right to set on fire any grass or trash on his own farm and that he is responsible for all damages that result from the spread of the fire to other property "through his negligence." If he exercised due diligence but the fire got away on account of causes beyond his control, as from a sudden shifting of the wind, he is not responsible. The court also holds that adjacent property-owners must not neglect to do all that they reasonably can to protect their properties from the fire.

On the other hand if any person without due regard to danger of injuring his neighbor's property or without taking proper care to prevent damage to his neighbors, starts and allows a fire to get beyond his control he is responsible for the damage done.

If any person "wantonly and willfully" starts a fire in any woods, marshes, or prairies in such a way as to occasion damage to any other person, he becomes liable on conviction to a fine of not more than \$500 nor less

than \$50, or to imprisonment in the county jail for not more than six months and not less than ten days or to both such fine and imprisonment.

Our correspondent's statement of his case, it will be seen, is too indefinite as to his neighbor's efforts to control the fire, and as to the question of wantonness and willfulness to enable the writer to determine the degree of his responsibility.

ARE THEY SWINDLERS?

EDITOR KANSAS FARMER:—A firm has written to me and told me that I had been recommended to them as a suitable person for their employ, and wrote me a nice letter representing their business. They also offered me a good salary to be paid weekly and expenses in advance, but in order to get me acquainted with their business, I must work thirty days at the rate of three dollars per day, regardless of results. All they asked was good, honest labor and when the thirty days were up, the salary and the expenses were to begin. They told me that they were a responsible firm and they meant just what they said, and signed their name to the letter. Was that binding them to do as they agreed in their letter? Then after the thirty days were up they presented an article to be signed which was very different in tone from the letter and I found that I had been misled. Did they use the mail for fraudulent purposes in order to deceive and draw me on? Does the firm sending out these letters with no intention of doing as promised, throw itself liable, and in what way?

Is there a soldiers' home in Fort Dodge? Will you give full particulars as to how it is conducted, who can and who can not be inmates, and on what conditions?

F. SHANNON.

Lyon County.

It is safe to assume in every case of employment offered that the compensation will come within the value of the services to be rendered. Persons, or, as they generally call themselves, companies, that offer extraordinary inducements and "sure things" for untrained service generally protect themselves by skillfully worded contracts or by conditions not noticed by the unwary. When they say that some agents are making "big money" or that they will pay such and such salaries, they are not probably lying in a literal sense. There are persons in agency work who are technically called "wind artists" who can sell anything to almost anybody without much regard to the value or utility of the article sold. Such agents bring big returns to their employers and receive big pay which they generally manage to spend before received. It is useless for an honest person to try to match these wind artists. It can not be done honestly. It should be always remembered that business consists in exchanging values and that no one has a right to take from another that for which he does not give an equivalent in commodities or services, or both.

It is poorly worth while for our correspondent to try to place the persons who have deceived and mistreated him in the toils of the law. Probably their literature and correspondence when carefully scrutinized will be found to furnish plenty of loop-holes for escape. The best plan is to keep clear of all extravagant schemes however attractively presented.

If our correspondent feels that he has been swindled and that it would be right for him to assist in guarding others against like treatment, it may be worth while to take all of the correspondence to the postmaster and ask

that it be referred to the proper division of the postal service.

There is a soldiers' home at Dodge City. This is scarcely the place to give full details as to how it is conducted and who may be admitted to it. This information may be had by addressing the Soldiers' Home, Dodge City, Kans.

ARCHED CELLAR.

EDITOR KANSAS FARMER:—I am planning to build a stone arch cellar, and I wish to know how to make it water tight. I intend to dig down about four feet and wall it up and arch it over. I intend to lay it up with lime and cement, and plaster it inside with cement. Will this keep the water out? Some say it will not. If not, how can I build it so as to keep the water out?

I saw a stone arch cellar that had been laid up with lime and cement which had about a foot and a half of water in it. This would not be very pleasant to jump into when dodging a cyclone or something of that kind.

Elk County. GEO. W. SMITH.

A stone cellar may be made proof against water by making the excavation deep enough so that a four-inch cement-concrete floor may be laid extending under the wall, and large enough so that the wall may receive a coat of cement plaster all over the outside.

It is possible to plaster a stone wall inside with cement mortar and make it hold against water pressure of, say, four feet. The wall should be left without pointing. It may even be nec-

essary to pick out some of the mortar in an unpointed wall so as to give the cement plaster abundant opportunity to bind to the wall. The wall should be free from all loose sand and dirt and should be well sprinkled with water just before the cement plaster is applied. The plaster may be made of one part Portland cement and two parts clean, sifted sand. It should be pressed hard with the trowel. The arch should be cemented on the top.

The floor may be made of cement concrete composed of 1 part cement, $\frac{1}{2}$ parts clean sand, and 5 parts coarse gravel or broken stone. This may be top-dressed with a thin coat of cement and sifted sand troweled smooth.

Mr. Smith may well consider the advisability of making the entire wall and the arch of cement concrete. In answer to an inquiry from Dr. B. F. Harriman, of Fort Cobb, Oklahoma, for directions for making a six-inch wall in a cave 12 by 22, 7-foot ceiling, THE KANSAS FARMER of October 5, 1905, made the following suggestions:

In making concrete walls the larger the proportion of cement the stronger the concrete. But it is not necessary to have the strongest possible concrete. By properly gauging the thickness of the wall sufficient strength can be secured at reasonable cost. For the purposes of our correspondent the proportion used in constructing the seawall at Galveston will doubtless give ample strength. In this wall there was used one part cement, three parts sand, seven parts broken granite.

Used in these proportions the fine sand of the sand-hills will answer. The editor does not like the term "crushed stone." It implies that some of the stone may be reduced to powder. There should be no considerable quantity of fine dust in either the sand or the rock. The broken stone may be of many sizes from that of a grain of wheat to that of a walnut. So, too, there may be both fine and coarse sand with advantage. But materials as fine as clay or silt weaken the work.

Mix the cement and sand dry; then mix with the broken stone; then add water. Two active men may mix 100 pounds—about 1 cubic foot—of cement

with the other materials at a "batch" without danger of serious injury from setting before it can be used if the cribbing be first made ready to receive the materials. The inexperienced will do well, however, to begin by using one bucket of cement and proportionate amounts of the other materials until a little experience has been gained.

If no broken stone is used and sand varying from fine sand to gravel is at hand, very good work may be done by using one of cement to five or even six of sand and gravel.

The cribbing for holding the cement in place until it sets is important. It must be strong enough to bear considerable pressure. The diagram shows a cross-section of the cribbing suggested for our correspondent's cave. The interior height of the cave is seven feet. The under side of the roof is made on a seven-foot radius. Should it be desired to make the cave higher the drawing may be considered as representing only the upper part. The side walls should be erected first. We have assumed that in digging the cave care will be taken to make the sides of the excavation true enough to serve as supports for the concrete.

The walls may be made in sections. In this case the first section will be made about twelve feet long. The cribbing will then be moved and the side completed. It will be necessary to have enough 2 by 6 by 12 pieces to support an entire section of the roof. This will require joists enough to make the cribbing for a section on each side so that the method shown for bracing for the cribbing may well be used. The frame

jobs to give their time to necessary legislation. They "take no thought what ye shall eat" except at the pie counter. Let us have a law to protect our stomachs.

THE DEMOCRATIC NOMINATIONS.

The Democrat State Convention met at Topeka last week, and placed in nomination the following ticket:

Governor—Wm. A. Harris, Leavenworth County.

Lieutenant Governor—Hugh P. Farrelly, Neosho County.

Secretary of State—Hugh C. Ahlbom, Smith County.

State Auditor—W. F. Bowman, Atchison County.

State Treasurer—Patrick Gorman, Bourbon County.

Attorney General—David Overmyer, Shawnee County.

State Superintendent of Public Instruction—A. B. Carney, Cloud County.

Associate Justices (for six-year term) —A. M. Jackson, Cowley County; D. M. Dale, Sedgwick County; (for four-year terms) W. S. Glass, Marshall County; Lorenz Hawn, Leavenworth County.

Railroad Commissioners—Harry McMillan, Ottawa County; C. A. Cooper, Rice County; Jas. Humphrey, Geary County.

Insurance Commissioner—J. W. Morphy, Russell County.

State Printer—W. F. Feder, Barton County.

In placing Colonel Harris at the head of the ticket, no less than in placing him on a platform to which little exception can be taken except that in style it is rather gushing, the Democrats have taken a strong position in State politics. In the United States Senate, Mr. Harris made a record of which Kansas is justly proud. His most conspicuous single service was rendered in connection with the settlement of claims of the Government against the Pacific railroads, in which settlement it is conceded that the Kansas Senator saved many millions of dollars for the Government.

The Republican State Convention is in session, at Topeka, this week. At this writing the slate-makers and the slate-breakers are busy, and some parts of the outcome are uncertain. It is generally realized that a strong ticket and strong positions will be necessary to the perpetuity of the one-sidedness of campaigns and majorities which have characterized recent Kansas elections.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year, and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

Many a man has a blind notion of stewardship about his property, but very few have it about their knowledge. . . . One grows tired of seeing cultivated people with all their culture cursed by selfishness.—Phillips Brooks.

Table of Contents

Alfalfa on new land, do not sow	483
Beef-meal, how to feed, and its value	486
Bermuda grass, a hardy	481
Boundary lines of farms	481
Breeding from immature stock	486
Cellar, arched	482
Children and gossip	488
Corn, interest in improvement of, advanced by corn contest	483
Cream, grading	494
Dairy cow, the profitable	495
Disparaging people	488
Do all that you can (poem)	489
Damages by fire, responsibility for	481
Damages on account of roads	481
Domestic Science Club	490
Democratic nomination, the	482
Farmers' Institute at Hays	484
Fleetfoot, the autobiography of a pony	489
Jack's plowing (poem)	490
Kansas Experiment Station and the Kansas stockmen	485
Kitten story, a	490
Man with the hoe, the (poem)	488
Millet, John Francois	490
Pasture questions	483
Poultry notes	497
San Jose scale in Kansas	493
Seed-corn, treating	483
Swindlers? are they	481
Sunday school lesson	492
Veterinary department	491
What is worth while?	488
Y. M. C. A. building, that	492

Twenty-five Bushels of WHEAT to the Acre



means a productive capacity in dollars of over

\$16 per Acre

This on land, which has cost the farmer nothing, but the price of tilling it, tells its own story. The

Canadian Government

gives absolutely free to every settler 160 acres of such land.

Lands adjoining can be purchased at from \$6 to \$10 per acre from railroads and other corporations.

Already 175,000 farmers from the United States have made their homes in Canada.

For pamphlet "20th Century Canada," and all information apply to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO. Mention this paper.

Well Drills and Drillers' Supplies

The best on the market. Manufactured by THATCHER & SONS, Stillwater, Oklahoma. Write for circulars and prices.

WEED

Cutter for listed corn, adjustable long knives with harrow attachment, seat and draft rod all complete \$6. Free catalogue of snap bargain prices on many other goods. New Process Manufacturing Co., Lincoln, Kansas.

BOOK FREE

FARM TELEPHONES How to put them up—what they cost—why they save you money all information and valuable book free. Write J. A. & Sons, 238 W. Water St., Milwaukee, Wis.

LAWN FENCE

Made of Steel. Lasts a life-time. We have no Agents. Sold to users at Wholesale Price. 7 cts. a foot up. Cheaper than wood. Catalogue Free. KITSELMAN BROTHERS, Box 399, Muncie, Indiana.



We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.



Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.

Ellsworth Crouch, Oakland, Kansas.

THE 20TH CENTURY GRADER

Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks, Levels, Land for Irrigation, Cuts Ditches, Cleans Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled. Descriptive Catalogue FREE.

THE WHITE CITY GRADER CO. Box F-7, WHITE CITY, KAN.

You Can Thresh

at your convenience, when the grain is ready and save stacking, save help and save grain if you use a

BELLE CITY SMALL THRESHER.

Good capacity, light, compact, durable, cleans all grains and seeds equal to any. No experts needed. Low in price. Fully guaranteed. Write at once.

Belle City Mfg. Co., Racine, Wisconsin. Box 78.



Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

Agriculture

Do Not Sow Alfalfa on New Land.

I am breaking a pasture this week, will finish in ten days. It is fifteen feet to rock (no water). Could I raise alfalfa on this ground? Had I better wait until fall or could I disk and harrow it and plant now? How many times should I disk the land and how many times harrow it before planting?

Barber County. M. C. CAVANAUGH.

It would not be advisable at all to sow alfalfa on the new breaking this spring, and I would not advise to seed to alfalfa even this fall. You could grow some sod crop this season and by cultivation subdue the sod and get the land into fairly good condition for seeding a year from this spring. Or if you do not grow a crop this season and disk the sod thoroughly, continuing the cultivation at intervals during the summer, doubtless a fairly good seedbed may be prepared for early fall seeding. Probably no amount of disking could put this new breaking in condition for spring seeding of alfalfa. Alfalfa seed sown on such land would not germinate except under the most favorable conditions and with an abundant supply of moisture.

If you have older land which has been farmed for several years and really needs a rotation with grasses or alfalfa I would advise to seed the older land to alfalfa and not to seed down immediately the new land which you are breaking. Alfalfa is a soil-renewing crop and should be used as such as well as for the profit which it may bring in as a crop. The new land is not in need of rotation with alfalfa, while the older farming land doubtless is already becoming exhausted in fertility and would be greatly benefitted by a few years' cropping with alfalfa. Also, old land, unless it is too exhausted in fertility, may be seeded down with alfalfa even more readily than new land, especially new breaking—such land will be too loose and mellow for a year or two to produce the best seed-bed condition for securing a stand of alfalfa. Alfalfa does not start well in a loose, deep, mellow seed-bed, rather the seed-bed for alfalfa should be quite firm and only loosened about as deep as the seed is planted—an inch and a half to two inches. The disregard of these points by farmers in the preparation of seed-beds is one of the main causes for failure to secure successful stands of alfalfa.

A. M. TENEYCK.

Interest in Improvement of Corn Advanced by Corn Contests.

PROF. V. M. SHOESMITH.

The farmer has for centuries shown considerable interest in live stock, and has organized associations of breeders for the purpose of furthering the interests of the respective breeds. He, however, has shown much less interest in the improvement of the farm crops. He has planted the ordinary seed of the neighborhood in which he lives, or perhaps has sent to another State, where the conditions are strongly contrasted to his own, and secured seed which is not at all suited for growing in his locality. He has not made a study of his corn, wheat, or alfalfa as he has of his live stock, and consequently knows very little about the best varieties of these crops to grow, best means of improvement, best methods of culture, etc.

The price of land and labor is increasing and our economic conditions are changing in such a way, that the best methods of farming must be practiced in order to get a fair return on our investments and the farmer is waking up to the fact that the best way to meet these changed conditions in the next few years at least, is by study and improvement of his farm crops and by better methods of culture for the same. He is now asking for the best seeds which are adapted to his conditions and is forming organizations for the improvement of corn and other farm crops. At the Kansas Experiment Station at Manhattan, eighty to ninety varieties of corn are tested each year, and the yield per acre of grain and stover are carefully taken, and notes are taken on the drought resistance, date of maturity, grade of corn, and other qualities which determine the value of the corn. Of the one hundred and twenty-five varieties tested in the past three years, which include about sixty-five varieties secured from other States, eight of the nine which have given the highest average yields are native corns, showing that

each State and each locality must work out its own questions in regard to the improvement of corn. It is necessary that we grow some of the native corns or adopt some of the recognized breeds of the older corn-growing States. Results at the Experiment Station indicate plainly that the former plan is by far the better.

If our native corns are the best for Kansas conditions the best of these should be included in the Corn-Breeders' Association's official list of pure-bred corn—provided they have strong type characteristics—as soon as their merits have been satisfactorily determined. This is what the Kansas Corn-Breeders' Association has planned to do. The objects of the Association, as enumerated in Article I, Section 2, of the constitution, are as follows: (1) "To establish improved types and breeds of corn which shall in the best possible way meet the needs of Kansas corn-growers in various parts of the State; (2) to promote the growing of pure-bred corn for seed purposes throughout the State of Kansas; (3) to furnish a means by which valuable native corn which shows purity of breeding may be recognized as pure-bred corn; (4) to establish a bureau for the inspection of the corn grown by the corn-breeders of the State and furnish certificates of type and breed for the same; (5) to protect farmers who desire to purchase pure-bred seed-corn, by supplying such information as will enable them to distinguish the different breeds of corn, and furnishing them with the names of reliable growers; (6) to aid in procuring the enactment of such laws and in doing such other acts as shall protect the growers of pure-bred seed-corn in their efforts to furnish farmers with seed-corn of the breed desired, and to further in any way possible the corn-growing interests of the State; (7) to establish a score-card or standard of perfection for each recognized breed of corn."

Article V., Section 1, specifies the manner in which a corn may be recognized as a pure-bred corn: "Any corn may be included as a pure-bred corn under the rules of this association by vote of the association in annual session assembled: (1) Provided, such corn has been bred and selected separate and apart from all other breeds, strains, or varieties for five years or more; (2) provided, that the board of directors, through at least one of its members or some competent inspector appointed by the board of directors, has carefully examined such corn in locality where grown as to its quality and uniformity of shape, size, color of ears, in regularity of kernels, in filling of butts and tips, in space between rows at crown and tips of kernels, in shape, size, depth and color of kernel, in percentage of shelled corn, in firmness of ear on cob, and in composition of kernels as indicated by the proportional size of germ, hard, flinty, and starchy portions, and provided also that the committee recommends to the association that such corn be recognized as a pure-bred corn; (3) provided, that the breeder of such corn brings one bushel of selected ears of it to the session of the association at which the association votes on the question of recognizing it as a pure-bred corn, and presents to the association a detailed description of the corn, including such history of the breeding and production of the corn as he may be able."

The association wishes to go slow in this matter and has not yet recognized any corn as pure-bred but has recommended the following native corns as desirable ones for growing in Kansas: Hildreth, yellow dent; Kansas Sunflower; Hammett White Dent; McAuley's White Dent; Mammoth White Dent; and Griffing Calico. The following varieties originated in other States have been recommended for planting, providing they have been adapted to Kansas conditions and have maintained their qualities after having been grown in the State for five successive seasons: Boone County White, Silvermine, Reid's Yellow Dent, Legal Tender, Hogue's Yellow Dent, Leaming, and Pride of the North.

The association holds each year in connection with its annual meeting a corn show, in which valuable prizes are offered for the best samples of corn. Expert judges are secured to place the awards and in this way the best corns are brought out and all the members present are given an object lesson in judging corn.

Another contest which the association has provided for is the largest yield from an acre of land, in which suitable prizes are offered. The contestants are allowed to use any corn and any methods of treatment they de-

sire. They are assisted in making the weights and measurements by a responsible person appointed by the Agricultural Department of the college, and one bushel of the corn is sent to the college as a moisture sample, so that all of the yields may be figured to the same (15 per cent) moisture content. Entries must be in by the 1st of September. In planning for this contest it would be well to observe the following suggestions:

1. Plant on the portion of your farm which has the best natural fertility.
2. Plant where the crop will not be liable to suffer from drought or floods.
3. Plant on alfalfa or clover land or land that has grown either of these crops in recent years.
4. Unless the land has been made extremely fertile by being into alfalfa for many years apply a medium thick coat of well rotted manure, but do not plow under coarse or strawy manure.
5. Prepare a good seed-bed, especially if the surface planter is to be used.
6. Plant several acres in one field, so that the best acre may be secured from many.
7. Choose a variety which is known to be a good producer and is well adapted to your conditions.
8. Test your seed-corn for vitality, germinating kernels from each ear separately so that the ears which show low vitality may be discarded.
9. Choose ears which have kernels of regular shape and size so that they may be planted evenly.

10. Use an edge-drop planter or litterer and test it before going to the field; if it fails to drop the proper number of kernels, more than five times out of a hundred, select your corn more carefully or change the size of the cells in the planter plates to more carefully fit your corn.

11. Cultivate your corn sufficiently often to keep the soil free from weeds and covered at all times with a soil mulch two to three inches deep.

For further information in regard to these contests address secretary of Corn Breeders' Association, Manhattan, Kansas.

Treating Seed-Corn.

Can you inform me how to treat seed-corn before planting to prevent crows and birds from digging it up?

Cherokee County. J. C. SEVERIN.

Corn is sometimes soaked in kerosene and other materials for the purpose of keeping birds, gophers, and other animal pests away from it, but carefully conducted experiments show that this practice is not to be recommended. If the corn is soaked for a sufficient time to keep the pests away the vitality is largely destroyed and it is a better plan to get rid of the pests in some other way or to leave them undisturbed rather than to run the risk of a very thin stand on account of low vitality of the seed.

V. M. SHOESMITH.

Pasture Questions.

I have four acres of English bluegrass, sown a year ago, that is rather thin, and four acres adjoining, sown last September, that is coming up well, but is, I fear, too thin to pasture. Can I do anything to make a thicker pasture of it? Will it do harm to pasture it by June 1? The September sowing is very clean except where the grass is coming up thin.

Also, I have a small lot used as a cow pasture last year, and I wish to make a calf and hog pasture of it. I had planned to sow cane. Is there any other plant—grass or clover—that it will pay to sow with the cane?

Butler County. H. L. MARSH.

It will not be possible to thicken up the stand of grass on the field in question by reseeding this spring. Early in September you may disk the fields and sow 5 or 6 pounds of alfalfa-seed per acre, or if you do not desire to use alfalfa in combination with the grass for pasture on account of the danger of pasturing alfalfa with cattle, you may disk early the following spring and sow clover with a little more grass-seed.

I would prefer Bromus Inermis to English blue-grass for pasture, and by sowing early in the spring, just as soon as you can get on to the ground, you will stand a fair chance of getting the young grass and clover to start. Sow 4 or 5 pounds of clover per acre with 6 or 8 pounds of Bromus Inermis. Bromus Inermis may also be sown in the fall with the alfalfa or without it, provided you do not wish to use the alfalfa, and a little clover could be seeded early in the spring without cultivation, taking care to sow the clover so that it may be covered by the freezing and thawing of the ground and the

HOLD UP!
and consider

THE POMMEL BRAND SLICKER

LIKE ALL
TOWER'S
WATERPROOF
CLOTHING.

is made of the best
materials, in black or yellow,
fully guaranteed, and sold by
reliable dealers everywhere.

417 STICK TO THE
SIGN OF THE FISH

TOWER CANADIAN CO., LTD., A. J. TOWER CO.,
BOSTON, MASS., U.S.A.

PAROID

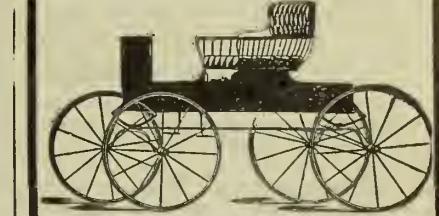
Before you buy roof-
ing for any building, from
a small poultry house to the
largest mill or factory it will pay
you to get samples and complete
proofs of the superior lasting qual-
ities of Paroid. (We originated the roll
of roofing ready to lay with fixtures
packed in the center.) Our concern was
Founded in 1817

We can show you why "Paroid" is the
best of them all; why it lasts longer
and why it saves most in repairs. Drop us
a postal to-day.

F. W. BIRD & SON,
East Walpole, Mass.
New York, Washington, Chicago,
Hamilton, Ont.

ROOFING

Two Years Guarantee



AND A BARGAIN

Send direct to our factory for catalog,
make your selection (many styles) and we
will ship it, freight prepaid, for you to try
30 days. If it doesn't stand the test, if quality
isn't high and price low (about half local
dealers'), if you are not satisfied, ship it back
at our expense.

You Deal With the Factory

when you buy our vehicles. Not a mail order
house or agent. And you can buy just as safely
from us as from any local dealer. Be sure
you send for catalog. We make it all plain
there. We pay the freight. Address Dept. II.

The Apex Mfg. Co., Bloomington, Ill.

The Waterloo Gasoline Engine

A popular engine at the
right price.

Also Power and Sweep Feed Grinders

Write for illustrated catalog.



WATERLOO GASOLINE ENGINE CO.

1014 Cedar St., Waterloo, Iowa.

Have hauled about 250 tons of alfalfa with the
press and find that it does first-class work in
every respect. The self feeder makes it entirely
safe to work with. Chas. Cook, La-
Junius, Colo.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN
MFG. CO., 1084 Jefferson St., Topeka, Kansas.

30 DAYS FREE TRIAL

SPLIT HICKORY

From 1905
carrying now
nearly 100 pages
100 styles vehicles
and harness.
Biggest Bargains.
Tell us what style
vehicle you want.

\$35

action of early spring rains. English blue-grass does not thicken up and you can only get a thicker stand of grass by reseeding.

The fall seeded fields should stand light pasturing by the first of June this season.

There is nothing which may be sown and grown successfully with cane which will add much to the value of the pasture—some prefer to sow a little Kauri-corn with the cane. At this station we have tried sowing cow-peas with cane, but the rank thick growth of the cane usually causes a very dwarf growth of cow-peas. By sowing the cane rather thin the cow-peas have a better chance, but the thinner sowing is not so desirable for pasture. Instead of trying to sow a combination of cane with some other crop it may answer your purpose to grow some other kinds of crops for pasture in the same field along side of the cane. Corn and cow-peas grow better together than cane and cow-peas. Sow about a half a bushel of corn and two to three pecks of cow-peas per acre. Also, cow-peas sown alone at the rate of 4 or 5 pecks per acre make excellent pasture for all kinds of stock. Grasses and clover could be successfully used for pasture in the same field with cane, but it will be necessary to seed the grass and clover the year previous in order to establish a stand and a sufficient growth to produce profitable pasture.

A. M. TENNEYCK.

Farmers' Institute at Hays.

A fine audience gathered in G. A. R. hall at Hays City at 2 p.m., April 23, to hear the speakers sent out by the State Agricultural College. Peter Johnson called the meeting to order and introduced Mr. J. H. Miller, the institute secretary of the Agricultural College who, in a brief statement, made known the purposes, aims, and benefits of the Farmers' Institutes that are being organized throughout the entire State. Mr. Miller had previously appointed a committee of the prominent farmers of the county and had impressed upon them the advantages to be derived by every farmer and merchant in the county from the organization of such an institution. Acting upon his suggestions, this committee had drafted a constitution and by-laws, which Mr. Miller presented to the meeting.

THE CONSTITUTION.

Section 1. The name of this association shall be the Ellis County Farmers' Institute Association.

Section 2. The object of this association is to diffuse knowledge concerning the scientific principles underlying the processes in operation on the farm, and in the household; to improve the farm practice and the household management in the county; to awaken in the young a realization of the inherent charm of rightly managed rural life; and in any other ways to add to the material, moral, and intellectual advancement of the people.

Section 3. The officers of this association shall be a president, four vice-presidents, secretary and treasurer, the duties of whom shall be those usually devolving upon such officers, and they shall be the executive committee of the association.

Section 4. Any person above the age of 16 interested in rural pursuits may be elected to membership.

Section 5. This constitution may be amended by a majority vote of the members present at any regular meeting, notice of the proposed amendment having been given at a previous regular meeting.

Upon vote of the meeting, the constitution was adopted. Mr. Miller then read the by-laws prepared, which are as follows:

BY-LAWS.

Section 1. This association shall meet annually in Hays, at a time to be arranged by the officers, unless fixed by the association; or upon call of the executive committee.

Section 2. The expenses of this association shall be met by voluntary contributions, except as otherwise provided by law.

Section 3. The annual dues of members of this association shall be 25 cents for each member.

Section 4. Persons elected to membership shall sign the constitution and by-laws and pay an admission fee of—

Section 5. All topics presented at meetings of this association shall be open to discussion. In discussion no one shall speak longer than five minutes at a time, and when the time available is limited preference shall be given those who have not spoken, over those who desire to speak a second time.

Section 6. No noisy or otherwise disturbing features shall be permitted to

be in operation while papers are being presented or discussion of them taking place.

Section 7. These by-laws may be amended at any regular meeting of the association by a majority vote, and may be suspended by a two-thirds vote of the members present.

Opportunity was given for remarks, and none being offered, the vote of the meeting on the adoption of the by-laws as read was called for, the same being in favor of their adoption, it was so ordered.

THE OFFICERS.

The appointed committee next presented through Mr. Miller, the chairman, the following list of officers which, upon vote of the meeting, were accepted. J. R. Chittenden, president; Peter Johnson, Jr., secretary and treasurer; B. F. Replogle, A. W. Copeland, Jerry Fellers, and Henry Schumacher, vice presidents. These officers compose the executive committee of the association.

THE FARM DAIRY.

The chairman then introduced Professor Oscar Erf, of the State Agricultural College, who addressed the assembly on the topic of "The Farm Dairy." Professor Erf in prefacing his remarks, dwelt upon the importance of the dairy proposition to the West, first, because of its profitability, and second, because it concerns the fertility of the soil. He cited instances where today, in the eastern parts of the United States, the soil has gradually become cropless, there being less fertile fields than twenty to fifty years ago, and that dairying had now become one of the first industries of the rural people, what small crops were raised being put into dairying. In foreign countries, especially European, small crops only are capable of being raised, and the bulk, if not all, of these go into the business of dairying. Another instance is that observed in the Mohawk Valley in New York State, where land had been farmed for 200 years. That part upon which the benefits of dairying were utilized is now worth \$200 an acre, while adjacent land that has become barren and unfertile because improper care of the soil, especially the absence of the dairy industry, has brought the worth of the land to 10 and 20 dollars an acre.

Jefferson County, Missouri, once considered barren and possessed of a soil unprofitable for any farming occupation, was settled by Swiss emigrants, who, knowing nothing about farming except the dairy part, practiced their industry there and made a wonderfully fertile land of that county. And a last citation, that of the Cache Valley in northern Utah, where land subject to irrigation is worth \$200 per acre, small crops are raised, and dairying and sugar-beet growing are the principal industries that are making these people wealthy.

Now, if the dairy proves profitable on high priced land, why can it not be more profitable on cheaper land? Prof. Erf then gave statistics of a test made at the Agricultural College with 15 cows, whose milking was recorded, and costs of feed computed to ascertain the cost of the production of a pound of butter fat. The highest cost proved to be 24 cents and the cheapest produced butter-fat cost 8 cents per pound. As the usual price paid for butter fat is 22 cents per pound, one can readily observe that the average of the costs of production given, would give the farmer a nice profit. The average Kansas cow gives about 97 pounds of butter fat per annum. It is not extraordinary of a well cared for animal to produce 400 pounds of butter fat per annum. It is far better to keep fewer cows and give the few better care; it is more money to the owner.

How can we find five good cows? The dairy proposition is a business and one must sit down and figure. Prof. Erf suggested that a card be tacked up at a convenient place beside each cow, and a record of her milk and its test be kept for fourteen milkings. After seven weeks, weight and test another fourteen milkings, and thus on throughout a year, at the end of which time an accurate record of the cows' productiveness is obtained. To obtain the cost of the cows' maintenance, weigh an average feed given her and compute from that the cost for the year. The only thing one can figure against butter fat, is feed.

Then there is the important question of conserving the fertilizer produced by the cow. It is of imminent importance. "Right now in Eastern Kansas" the commercial article is being used. The produce of one cow can not be bought in the East now for \$30.

Prof. Erf then directed his talk to

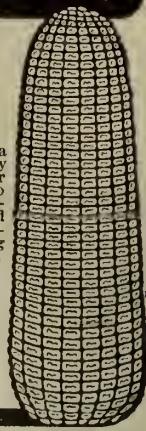
GROW BIGGER CORN

Mr. Farmer—if you want to grow bigger, better, brighter corn we can furnish you the tools that will help you do it. We can help you to increase your yield from the corn field. We can help you to make your farm pay and we can save you work. Our

"St. Joe" Double Row Disc Cultivator.

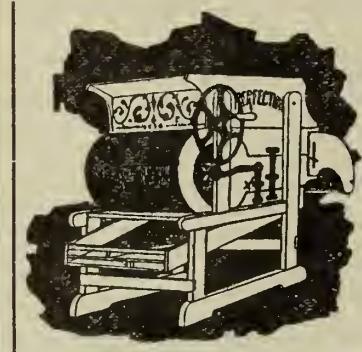
An improved modern machine for corn growers that cultivates two rows at a time will cultivate your crop in half the time and do the work better than any cultivator on the market. It will make your corn grow bigger and better and increase your yield because it cultivates so thoroughly and so well. It is easily handled and is an improved machine all over-built for the up-to-date money-making farmer who appreciates good tools. The "St. Joe" will work to suit you. Ask us for circular describing cultivator features not found in any other machine—every one a time-saver that you ought to know about. Write for it today.

ST. JOSEPH PLOW CO.,
Box 12 St. Joseph, Mo.



Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: ::



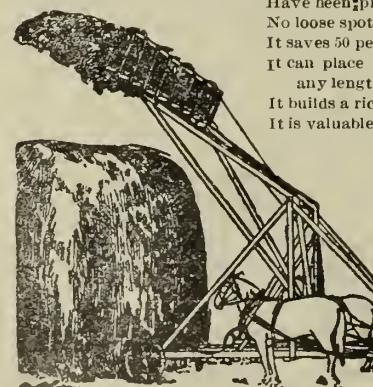
A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

THE JAYHAWK STACKERS AND RAKES



Have been proven the best by test.

No loose spots to settle, take water and spoil.

It saves 50 per cent of the labor on the stack.

It can place hay in any spot on a rick of any length.

It builds a rick 20 feet high.

It is valuable in retopping.

No troublesome pulleys.

No stakes to drive.

No trouble with winds.

No time lost moving.

No upsetting.

No bother with long ropes.

It is a good wagon-loader. It has only 18 foot of rope. Team only travels twice as far as the load is raised. The load can be carried and dumped at any point of elevation. It is a great labor saver.

We also manufacture two patterns of

Sweep Rakes

We Ship Responsible Parties on Trial

Give us a chance to do so by letting us know your wants.

YOURS FOR ABSOLUTE DEAL

The F. Wyatt Mfg. Co., Salina, Kas.

Mention Kansas Farmer.

BINDER TWINE NO ADVANCE THIS YEAR;

For Standard twine; the best can be secured of us at lower prices than all others ask? Do not fail to send today for our new cash and credit prices with complete samples.

CRICKET — DON'T FAIL To secure our prices for your own protection. Postal Card places your name on our mailing list for 5 years.

CRICKET PROOF — Prepared by our secret process, a most desirable feature rendering our twine more valuable than any other. It is imitated

TRADE MARK — Registered with the U. S. Government, which is our guarantee that it is of the highest

grade, and superior to any other twine made in America. Postal Card to nearest place, and receive by mail, samples, prices, etc. Ask for Lot No. 133

COOPER CORDAGE COMPANY | 4 Sherman St. | 310 4th Ave. So. | 1209 Union Ave. | CHICAGO | MINNEAPOLIS | KANSAS CITY

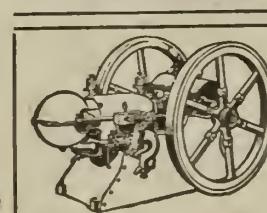
LIGHTNING GASOLINE ENGINE

[STATIONARY AND PORTABLE, 3 TO 25 H.P.]

NEW PLAN FOR COOLING CYLINDER

Reduces Water Tank to a Few Gallons
Send for Catalog.—Special Farm Engines

KANSAS CITY HAY PRESS CO., Mill St., Kansas City, Mo.



the different types of milk cows, explaining with the aid of charts, the conformation found in the profitable dairy type, and where they could be found when examining any cow. He dwelt upon the care of the animal, both in wise feeding and gentleness in the milking process, explaining the increased good derived from observing this care. He urged upon his hearers the wisdom of beginning the business of dairying, even though on a small scale to start with; and that once launched therein, the fears of drought or prairie winds need have no terrors. He reiterated the warning given in his first remarks, that continuous cropping of the soil with no variation of the crop, will sooner or later bring about a barren condition unless some such preventive, as dairying were introduced to balance conditions. The West needs more alfalfa, also more dairy cows.

Upon the conclusions of Professor Erf's address, the chairman presented Professor TenEyck, who spoke on

SOIL CULTURE.

Professor TenEyck is at the head of the Agricultural Department of the Agricultural College, and is a most able scholar and a tireless practitioner in his profession. His reception was no less cordial than that tendered Professor Erf when that gentleman arose to talk upon dairying.

Professor TenEyck opened his address by the statement that in farming, there is no set of iron-clad rules. While the principles of agriculture are about the same in all places, experiments and experience are necessary in the cultivation of the soil and the growing of crops, before conclusions can be determined. The three important considerations with any crops' improvement, are: The breed, or quality of the seed, the feed for the crop, and the methods of its culture. It has long ago been satisfactorily decided, that the hard, red types of wheat are best adapted for the West, but there are now no pure stocks being grown, owing to the quality of the seed having deteriorated by inattention to breeding or selecting. Farmers should give this question more attention. Select seed especially for seeding purposes, for special fields to produce seed stock, by planting a piece of the best ground to best grade of seed obtainable, and under best conditions possible to make for that special crop. Harvest at the right time and care for the grain in the right manner. Kansas conditions must make Kansas crops, and selection and culture are the secrets.

Good seed can not be obtained in one, two, or five seasons, but it takes fifteen to twenty years of careful growing to obtain results desired.

With regard to the feed of a crop, nitrogen, potash, and phosphorus are the three essentials that provide sustenance to the growing grain. Wheat requires a highly nitrogenous soil. These elements are soon exhausted from the soil and unless methods are introduced whereby new stores of them are replaced, the land soon ceases to be productive. For this reason, proper cultivation is of most vital importance.

In the sections of the west where light rainfall is the rule, the conserving of what moisture does fall is necessary to produce, or mature a crop. In the conservation of this moisture in the soil, we may say there are three steps to follow. First: Get water down in the soil. This is accomplished by plowing and discing, which opens the soil for water to penetrate, also prepares the soil reservoir for its reception. Second, repack, or firm up, the soil, connecting the furrow slice with the subsoil reestablishing capillary conditions, in which the surface soil draws the moisture to stimulate the plant life it grows. Ground should not be firm at the surface, but at the bottom of the seed-bed. Third: Keep a mellow surface by cultivation to prevent the evaporation of the moisture stored.

The seed-bed for all small grain should not be loose, but of firm body which gives the grain the best conditions for germination. As an example, a sample of dead wheat was presented, showing good rooting, and little stem. It had been seeded in soil that was well prepared, that is, plowed, and harrowed several times. The weather conditions of the winter and spring tended to air-dry the soil so that at present it is extremely loose. Under that condition, the wheat has died and, in all probability caused by the loose condition of the land, which aided wind, freezing, and drought to accomplish its death.

A firm seed-bed is essential to securing a good stand. It likewise gives

more vitality to the crop, and aids it to withstand a dry winter.

Prof. TenEyck reminded his listeners that one season does not make results. One must judge from the average of many seasons, as to whether proper or improper cultivation, that is, good, bad, or indifferent, pays the farmer the best. There is no gainsaying the fact that in the long run, the good farming will always show up the best returns.

He dwelt upon the value of the disc-harrow to the farmer, and stated various uses it could be put to, especially his experience in preventing the blowing of soil. He urged also, the use of the packer to obtain the ideal conditions for the seed-bed.

Upon his own suggestion, he made his address brief so as to have more time for open discussion.

GEO. K. HELDER.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

May 17, 1906—Great sale of all beef breeds of cattle at Wichita, Kans. D. R. Mills, Des Moines, Iowa, Manager.

May 15, 1906—Combination sale of Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.

May 17, 1906—Combination sale of Aberdeen-Angus, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.

May 29-June 1, 1906—Sale of all beef breeds, Kansas City sale pavilion, D. R. Mills, Mgr., Springfield, Ill.

June 7, 1906—F. M. Marshall, Blackwater, Mo.

June 12-14, 1906—Sale of all beef breeds at Sioux Falls, S. D. D. R. Mills, Mgr., Des Moines, Iowa.

June 19-20-21, 1906—Dispersion of Tebo, Iowa, Snorthorpe, E. B. Mitchel, manager, Clinton, Mo., at Kansas City.

June 26-28, 1906—Sale of all beef breeds at Des Moines, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.

October 2-3-4-5, 1906—Glasco Live Stock Association sale of pure-bred stock, Glasco, Kans.

October 19, 1906—H. L. Faulkner, Jamesport, Mo.

October 17, 1906—W. J. Honeyman, Madison, Kans.

October 19, 1906—Poland-Chinas, W. A. Pruitt, Asherville, Kans.

October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.

October 20, 1906—W. R. Dowling, Norcatur, Kans.

October 23-24, 1906—E. A. Eagle & Sons, Agricola, Kans.

October 24, 1906—Poland-Chinas, Frank A. Dawley Waldo, Kans.

October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.

November 1, 1906—Frank Zimmerman, Centerville, Kans.

November 6, 7, 8, 1906—Sale of all beef breeds, Kansas City Sale Pavillion, R. A. Ford, Lawson, Mo., Manager.

November 8, 1906—T. P. Sheehy, Hume, Mo.

November 13, 1906—Howard Reed, Frankfort, Kans.

November 16, 1906—G. M. Hebbard, Peck, Kans.

November 20-23, 1906—Blue Ribbon sale of all beef breeds, D. R. Mills, Mgr., Des Moines, Iowa.

November 27, 1906—L. C. Caldwell, Morau, Kans.

December 4, 1906—Poland-Chinas, Lemon Ford, Minneapolis, Kans.

December 11-12, 1906—James A. Funkhouser and Charles W. Armur, sale pavilion, Kansas City.

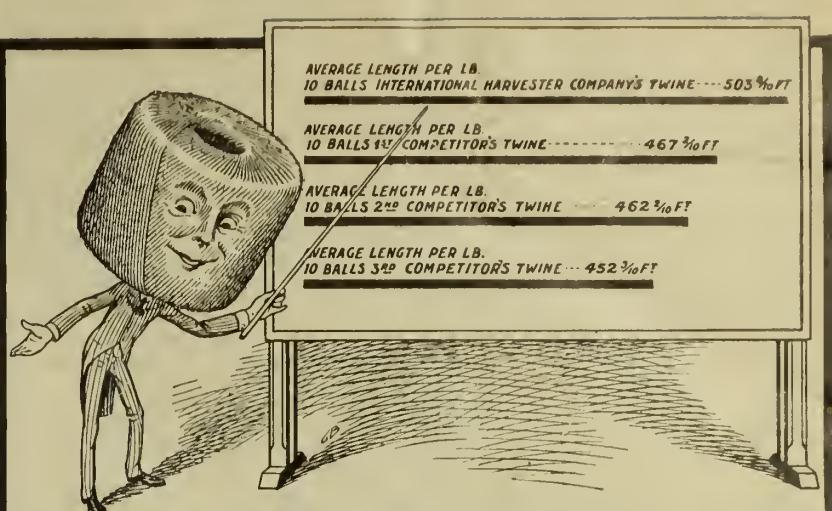
Improved Stock Breeders Association of the Wheat Belt—November 13, 14, 15, 1906, at Arkansas City, Kans.; I. E. Knox, Nardin, O. T., manager; Dec. 5, 6, 7, 1906, at Anthony, Kans.; Chas. M. Johnston, Caldwell, Kans., manager; Dec. 18, 19, 1906, at Wichita, Kans.; J. C. Larimer, Derby, Kans., manager; Feb. 13, 14, 15, 1907, at Caldwell, Kans.; Chas. M. Johnston, Caldwell, Kans., manager.

The State Experiment Station and the Kansas Stockmen.

EDITOR KANSAS FARMER:—Very properly the State Agricultural College and Experiment Station is working along varied lines, crop production, dairying, domestic science, horticulture, and general stock interests. The animal husbandry department has been at work on several very interesting experiments, in both breeding and feeding, and I thought the readers of your paper would be glad to know about these experiments. The great lack of good barns will prevent any extensive breeding investigations, but this will be remedied in time.

Five registered Tamworth sows, full sisters, were bred to different boars, one to a Tamworth, one to a Poland-China, one to a Duroc-Jersey, one to a Berkshire, and one to a Yorkshire. The progeny are now about a month old, and will be fed the same grain ration, and will be treated exactly alike until sold with a view to seeing which cross will produce the most economical feeders.

A notable experiment was conducted last year of great interest to men who feed cottonseed-meal to hogs. Two sows, a Duroc and a Poland-China, were put upon a ration of corn-chop and shorts and cottonseed-meal soon after bred, the meal being made a fifth of the ration. This was kept up until the end of the suckling period, and two weeks after the pigs were weaned they were given the same proportion of cottonseed-meal, soon raised to 25 per cent. Early in September the pigs began to lose flesh and two died. Then the cottonseed-meal was dropped from the ration and the pigs did well from then on. These pigs were kept in a dry yard without grass. Nobody has been able to explain the peculiar cause of cottonseed-meal poisoning, but



How LONG is Your Pound of Binder Twine?

DID that question ever occur to you while laying in your supply of twine for harvest? Makes a good deal of difference.

A pound's a pound the world around," it is said. But that rule does not measure the length, strength or quality of binder twine. And these are important to you.

The answer depends upon whose binder twine you buy.

Of course competing sellers can make all kinds of assertions. It's not bald assertions you want, but proof as shown by actual tests.

Now here is one test that has been carefully made—and what is better, one you can make yourself without any trouble.

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and ten balls each of three competitors' standards were tested.

The above illustration shows that competitors' twines run from 467 2-10 feet to as low as 452 3-10 feet to the pound—while International runs above 503 feet to the pound.

There's a great difference in pounds, as you will observe.

Means a great difference in price also. The International Harvester Company twine is the least expensive twine, as you can figure at a glance. Frequently so called "cheap" twine is

Five hundred feet is considered the standard for length of sisal and standard twines. When your twine runs below this you are not getting what you are paying for.

Ten balls each of the International Harvester Company's regular Standard twine, and

enough tests have been made to prove the danger of continuing this ration very long. It is not considered safe to let hogs follow for over forty days steers that are being fed cottonseed-meal.

On October 9, 1905, three lots of late spring pigs, averaging 129 pounds, were put upon three different rations. The pigs were practically the same age and were almost the same in weight. Lot I was fed corn-meal only and gained one pound a day for 112 days. Lot II was fed corn-meal and meat-meal and gained one and three-fourths pounds a day. Lot III was fed corn-meal and alfalfa hay and gained one and one-fifth pounds a day. In lot I, one hundred pounds of gain cost \$4.32; in lot II, the cost was \$4.05; and in lot III, \$4.13. Lot I was fed 13½ bushels of corn, lot II, 14 bushels; and lot III, 14.06 bushels. The total cost of the feed was as follows: Lot I, \$48.05; lot II, \$80.07; and lot III, \$54.53. The cost per hundred pounds being a little less for lot I with the meat-meal.

A common question sent to the animal husbandry department is, "Which will feed better or cheaper, steer or heifer calves?" Two lots were therefore selected of ten each, all sired by same bull, and the experiment continued for 268 days. Both lots were fed alike, shelled corn and alfalfa, then corn-and-cob-meal and alfalfa, and later a little corn-meal was added. The heifers gained 422.5 pounds or an average of 1.48 pounds per day at a cost of 5.14 cents. The heifers put on more fat while the steers made more growth.

So many inquiries had come relative to the value of ensilage that a careful test was made. Six Shorthorn steers were in each lot. Lot I was fed corn-and-cob-meal and alfalfa, and lot II had added to this 11.9 pounds per day of ensilage. Lot I gained 629 pounds, lot II, 624 pounds, averaging 2.87 and 2.85 pounds. The cost of gain in lot I was 6.5 cents, and in lot II, 6.3 cents. Lot I had each day 20.24 pounds of grain and 17.92 pounds of alfalfa, while lot II had of grain 18.31 pounds and of alfalfa 14.95 pounds. Possibly had more ensilage been fed in the first half of the experiment the gains would have been larger. Professor Kinzer does not think the feeding value of ensilage is great enough here in Kansas to justify the building of silos unless it be for the handling of the first crop of alfalfa which is so often damaged by rains.

As sheep-feeding is becoming very common in Kansas, the animal husbandry department of the Agricultural College carried on an experiment last year that will interest every sheep farmer or feeder. Lot I fed on Kafir-corn and alfalfa gained in the experiment 22 pounds; lot II on corn and alfalfa, 22½ pounds; lot III on emmer and alfalfa, 26.6 pounds; lot IV on barley and alfalfa, 26 pounds; lot V on corn and wild hay, 12½ pounds; lot VI on corn and Bromus inermis hay, 21½ pounds; lot VII on corn, cottonseed-meal, and alfalfa, 24 pounds; lot VIII on Kafir, cottonseed-meal, and alfalfa, 25 pounds; lot IX on corn, dried blood, and alfalfa, 23 pounds; lot X on Kafir-corn and soy-bean fodder, 13 pounds. This experiment demonstrated the great value of alfalfa and barley and emmer for sheep-feeding.

A test was also completed recently to determine the relative feeding value of Montana and Mexican sheep. They were fed 101 days. Different feeds were used, but the comparison remained about the same in all tests.

Lot I.—Montana—Kafir-corn and alfalfa—41 pounds; Mexican—Kafir-corn and alfalfa—30 pounds.

Lot II.—Montana—cane and alfalfa—39 pounds; Mexican—cane and alfalfa—31 pounds.

Lot III.—Montana—shelled corn, cottonseed-meal, and prairie hay—36 pounds; Mexican—shelled corn, cottonseed-meal, and prairie hay—24 pounds.

Lot IV.—Montana—shelled corn, corn silage, alfalfa—37 pounds; Mexican—shelled corn, corn silage, alfalfa—31 pounds.

J. H. MILLER,
Manhattan, Kans.

Breeding from Immature Stock.

Is it a fact that by breeding young sows each year, you would in time breed your pigs small? Is there anything in it?

The sows do not farrow until they are 14 months old, and in picking out the brood sows, those of the largest size and having the greatest length are kept. The sire in most cases is a 2-year-old. Please write me what you know about the matter and greatly oblige.

H. G. LAMBORN,
Leavenworth County.

Breeding from immature stock will

certainly tend to reduce the animals in size and vigor if persisted in. Of course, it is necessary to use gilts from time to time as brood sows, but if care is used to see that they are well developed and of good size no harm will come of the practice, providing the sire is always an aged animal. A brood sow which has shown her value as a breeder should be retained and kept producing as long as possible. The practice of selling off all of the old sows each year and replacing them with gilts will tend to deteriorate the stock.

G. C. WHEELER.

Beef-Meal, How to Feed and Its Values.

Can you advise me through your valuable paper, as to the value of beef-meal? Have any experiments been made at the station? If so, with what results?

Our dealer recently had a car-load of beef-meal shipped in, and he is selling it at \$2 per hundred. Is it a paying investment to feed it at this rate? The hogs seem to eat it with a relish. How ought it to be fed, dry or in slop? Any information you can give me will be highly appreciated.

Marshall County. HERMAN SCHEIBE.

I enclose you a copy of Press Bulletin No. 149, which gives the results of our last experiment in testing Armour's meat-meal for swine-feeding. You will find in the columns of THE KANSAS FARMER of March 1 a brief statement of the results of this experiment.

This meat-meal is very rich in digestible protein, containing over 60 per cent of that nutrient. In this experiment we fed over one pound daily.

We have just begun another experiment testing two different brands of meat-meal, and expect to feed it at the rate of one-half pound daily to a 150-pound hog. This proportion will give a nutritive ratio of about 1 to 6, which is narrow enough for fattening purposes. It is more profitable to feed it in the form of a slop, as more or less will be wasted if fed dry.

G. C. WHEELER.

The Shorthorn Auction at Wichita, May 17.

Sale manager R. R. Mills, Des Moines, Iowa, writes that on Thursday, May 17, at Wichita, Kans., choice offerings of Shorthorns will go under the hammer, presenting one of the last and best opportunities of the season to secure bargains. A few additional entries can be accommodated, up to day of sale, and those having really good cattle to sell, will do well to communicate with him at once, the terms for selling being \$15 per head.

Quite a number of selected bulls of a high order and in nice condition, have been listed for this important event, consisting of Scotch and Scotch-topped cattle and embracing Young Marys, Rose of Sharons, Belinas, Rubys, Carolines, and other popular sorts. Mr. Henry Stunkel, Peck, Kans., is sending a carload of highly bred young bulls, mostly sired by his richly bred Cruickshank Butterfly sire, Victor Orange 196218, a son of Victor Butterfly 140117, dam Orange Bud 7th by Scarlet Knight 110111. Other sires are also represented in this consignment, including Hudson Captain 156300, a son of the pure Scotch, Village Captain 135732, and out of Miss Hudson Thistle, by the Harris-bred Cruickshank Victoria Thistlewood 95417. These are all a sappy lot of young bulls, low-down, thick-set individuals, that will suit the most fastidious admirer of the breed. They are from highly bred dams, and Mr. Stunkel writes that they are not only in fine condition, but the best lot that ever left his farm.

While mentioning the bulls in this sale, one of the attractions that should not be overlooked is a Cruickshank-topped Young Mary, listed by Mr. F. H. Foster, Lyons, Kans., being a deep-red 2-year-old, sired by Lovely Gloster 184123, a choicely bred Cruickshank, sired by the Barr-bred Gloster Chief 152747, and dam by the Bellows-bred Scottish King 400743. This youngster shows considerable breed character, and should be looked after by any one looking for an especially good one. Extended mention of all the other consignments will be given next week, and in the meantime those desiring catalogues, or wishing to make additional entries, should address at once, D. R. Mills, sale manager, Des Moines, Iowa. The sale will take place in G. O. Morgan's Riverside Barn, West Douglas Avenue, where such sales are usually held, and will begin promptly at 1 p. m.

Quroollo's Berkshires.

James Quroollo, the Independence, Mo., breeder of high-class Berkshires, the man who developed the sensational

BLOAT IN CATTLE IS DANGEROUS.
Bloat in cattle is a condition that always confronts the owner when turning them on pasture, and it is well to be prepared for such emergencies. Dr. J. A. Beatty, V. S., of Montrose, Colo., writes: "I have found a number of new uses for Zenoleum and a very valuable one in the alfalfa country is its efficiency in bloat. It is, without doubt, the quickest and surest remedy for bloated cattle I have ever seen. You should print this quickly so people interested can be informed regarding its value in such cases." Zenoleum is very reasonable in cost, \$1.50 a gallon, express paid. Most druggists sell Zenoleum. It is made by the Zenner Disinfectant Company, 61 Lafayette Ave., Detroit, Mich. An interesting 64-page book, "Veterinary Adviser," is free for the asking.

boar, Masterpiece, and sold him for \$1,000, starts his advertisement in this issue of THE KANSAS FARMER, and invites our readers to call and inspect the herd or write their wants. He has a splendid lot of pigs for the trade. A considerable number of them by the double-bred Masterpiece boar, Lord Bacon 87145. As 10 of the breeding sows are daughters of Masterpiece also it places the herd of Mr. Quroollo in the front in the number of salable pigs carrying the blood of this, the most talked of Berkshire hog of the present time. It is generally known among the admirers of the breed that this great hog recently sold for \$2,500, making him the highest priced Berkshire ever sold. Write Mr. Quroollo your wants.

Little's Successful Sale.

Although a dispersion sale of his herd of Shorthorn cattle, Colonel H. R. Little, of Hope, Kans., scored a distinct success and made one of the best sales on April 26, that has yet been made in the State this season. The offering included a number of old cows and several weaned calves, sold apart from their dams. Everything went. The center of interest was in the herd bull, The Rustler, who was sold to Frank R. Wilson, Glasco, Kans., for \$525. Some of the best bargains of the sale were the heifer calves sired by this bull. Mr. Wilson is to be congratulated on getting such a bull at such a figure. A change in business made Colonel Little feel that he was obliged to disperse his herd, and it is with regret that we note that another good breeder has gone out of the business. However, the dispersion of this herd may be the means of founding other herds and increasing the number of breeders of Shorthorn cattle in Kansas. The sale was as follows:

1. Herd bull, Frank R. Wilson, Glasco	\$525.00
2. O. L. Thisler, Chapman	60.00
3. C. W. Taylor, Chapman	200.00
4. C. W. Taylor	130.00
5. C. W. Taylor	145.00
6. Frank R. Wilson	120.00
7. P. M. Lyne, Oak Hill	105.00
8. Thos. Gribben, Hope	57.50
9. Thos. Gribben	35.00
10. Substitute, O. L. Thisler	30.00
11. Thos. Gribben	42.50
12. C. J. H. Lane, Ramona	130.00
13. Thos. Gribben	50.00
14. Frank R. Wilson	150.00
15. L. C. Kimport, Dellville	100.00
16. Clem Bell, Abilene	75.00
17. O. L. Thisler	40.00
18. O. L. Thisler	100.00
19. L. C. Kimport	40.00
20. T. Randall, Hope	65.00
22. L. C. Keypert	85.00
23. J. H. Taylor, Chapman	55.00
24. O. L. Thisler	100.00
25. T. Randall	60.00
26. Frank R. Wilson	85.00
27. Frank R. Wilson	100.00
28. Jesse Sheets	55.00
29. Frank R. Wilson	75.00
30. G. H. Shier, Gipsum	45.00
31. C. M. Garver, Abilene	50.00
32. O. L. Thisler	60.00
33. J. H. Taylor	35.00
34. Frank R. Wilson	50.00
25. Frank R. Wilson	40.00
36. O. L. Thisler	40.00
37. Frank R. Wilson	100.00
38. L. C. Kimport	70.00

BULLS.

39. H. A. Henderson, White City	\$155.00
40. Thos. Gribben	80.00
41. J. S. Bayard, Carrollton	55.00
42. C. M. Garver	50.00
43. L. N. Hackler, Tampa	40.00
44. C. P. Pitts, Navarre	60.00
46. C. M. Garver	105.00
47. T. H. Lay, Hope	50.00

The 45 head sold for \$3,900; the general average was \$87 per head.

Gifford's Shorthorn Sale.

Everybody in Central Kansas who knows Shorthorn cattle also knows the Elmwood Herd belonging to the Giffords, who have bred these cattle for thirty years at Milford, Kans. On Wednesday, April 25, Mr. F. M. Gifford, the present owner of Elmwood Herd, conducted their twenty-second annual sale. The catalogue showed thirty-seven head, and they were good animals and well prepared for the sale. Owing to the late season and the pressure of farmwork it is almost impossible to get a farmer out of his field no matter how important the occasion. This fact alone is sufficient to explain the situation in which Mr. Gifford found himself at Manhattan on Wednesday last. He had good animals in good condition, but no buyers, hence the average was low for the quality of stock offered and the sale the least satisfactory one ever held by Elmwood Farm. There was one demand for the bulls in the offering, and the first few of them averaged more than \$100 each. Contrary to expectation and the general record of Shorthorn sales this spring the females brought slightly more money than did the males. This is the only case of the kind we call to memory for this season.

The top of the sale was brought by The Abbott 253713. This is a Young Mary bull by Red Gauntlet 3d, whose dam was a descendant of the famous Imp. Thistle-top. He sold for \$120 to W. E. Schwaneke, of Alma. A cow consigned by the Kansas Agricultural College topped the sale of females.

Among the buyers were the following: E. Wolf, Gaylord, Kans.; S. B. Amocoats, Clay Center, Kans.; A. A. Richards, Manhattan, Kans.; Kansas Agricultural College, Manhattan; J. M. Garver, Abilene; Henry Myers, Wakefield; Corey Bros., Talmia; E. Hanson, Olsburg; W. T. Worrall, Zeandale; O. B. Heath, Wakefield; W. A. Sharp, Riley; O. P. Randall, same; Jenkins Bros., same; W. F. Matthews, Wymore, Neb.; W. J. Wiessner, Ogden, Kans.; C. B. Gillett, Olsburg; Chas. Curry, same; Dan Roether, Milford; D. O. Wickstrum, Riley; N. L. D. Corey, Riley.

SUMMARY.

16 bulls brought	\$1,242.50
Average	77.91
11 females brought	890.00
Average	80.91
27 head brought	2,135.00
Average	79.08

Warranted to give satisfaction.



GOMBault's CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Soint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone, and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

No More Blind Horses

For Specific Ophthalmia, Moon Blindness and other Sore Eyes, BARRY CO., Iowa City, Ia., have a cure



NEWTON'S HEAVE AND COUGH CURE

A VETERINARY SPECIFIC.

14 years' use. One to two cans will cure Heaves. \$1.00 per can. Of dealers, or express prepaid. Send for booklet.



Fistula and Poll Evil Cure

—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket Veterinary Adviser.

Write us for free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated.

FLEMING BROS., Chemists, 212 Union Stock Yards, Chicago, Ill.



KRESO DIP KILLS LICE

ON ALL LIVE STOCK EASY & SAFE TO USE



BLUE CATTLE LOUSE

KRESO DIP KILLS THIS AND ALL OTHERS

RED CATTLE LICE, HORSE LICE, HOG LICE, SHEEP LICE & TICKS, POULTRY LICE, DOG L

The Alysdale Shorthorns.

Alysdale, "the most beautiful farm in Kansas," is a delightful place to visit at any season of the year but especially so in the spring. Situated at the foot of Burnett's Mound, the highest point in Eastern Kansas, with the Shunganunga Creek winding through its wooded pastures; with its broad expanse of vivid green alfalfa, its commodious hay and cattle barns, its beautiful "lodge," and the air of prosperity and comfort which pervades the entire place, it will long be remembered by all who have visited it.

In perfect harmony with all its beauty and adding to it is the herd of Shorthorns. Born in the purple and reared under the most favorable conditions in the most favored State on earth, these Shorthorns but add to and perfect the landscape of beautiful Alysdale. They are at home there.

This herd is headed by Prince Consort 187003 by Imp. Prince of Perth, and out of Goldfinch, a full sister to the famous champion, Lavender Viscount. His calves leave nothing to be desired. They are fine, and a few of them are now for sale. There are a few other young bulls on this farm for sale also. One of them is a grandson of Gallant Knight, the magnificent herd-header of the T. K. Tomson & Son's herd. Another is by that grand old Lord Mayor, whose value to the breed can never be told, and who has made the herd of T. P. Babst & Sons famous. Yet another is by Mayor Valentine by Knight's Valentine. There are others. If you want a fine, solid red, Scotch bull that is ready for hard service and that will prove a money-maker, inquire of C. W. Merriam, Columbian Bldg., Topeka, or go to Alysdale and get him.

Gossip About Stock.

The Wellington Voice says the shipment of cattle from Texas, New Mexico, Colorado, and Western Kansas to the pastures in the Flint Hills of Southern Kansas will be larger this season than ever before; that the Santa Fe and Missouri Pacific roads will handle about 70,000 head and the Frisco and Rock Island about the same number, a large part of the shipment being transferred from one line to another.

J. B. Davis, of Fairview, Kans., who is known far and wide as a breeder of the best of Duroc-Jerseys, is better equipped than ever to supply his customers. The boars he has now for sale were sired by the second-prize yearling boar at the Kansas State Fair, and by Monarch, whose dam was a full sister of Ohio Chief. The dam of some of these best pigs is a granddaughter of Kansas Wonder. Altogether Mr. Davis has 120 pigs by Crimson Challenger, Kansas Wonder, and Monarch from which his customers may choose. One of his brood sows is by the grand champion of the Indiana State Fair. Another is by Kant-Be-Beat, and others are of like breeding. This is a mighty good bunch of hogs to buy from if you want good quality of the large, early-maturing kind. Mention THE KANSAS FARMER and write Mr. Davis. He is sure to please you.

The Blue Valley Creamery Co.

This immense business institution derives its name from the location of its birthplace. In the beautiful little city of Marysville, Kans., located on the banks of the Big Blue River, this company first saw the light. Here the business methods pursued and the quality of the product made caused this infant industry to grow by leaps and bounds and larger quarters and better railroad facilities became necessary. This caused the removal of headquarters to St. Joseph, Mo., with the retention of the original name.

After a few years of unexampled prosperity at St. Joseph, the business again demanded more room and a branch house was established in Chicago. This Chicago house has already cost \$50,000 to establish and only the beginning has been made. Plans are laid for the rapid extension of the plant to meet the demands of the business and approach the ideal of the owners.

The Blue Valley Creamery Co. is a great, big institution, and it has attained its present dimensions through fair dealing and prompt payments.

The Chillicothe Auction School.

Our energetic young friend, Col. Harry W. Graham, of Chillicothe, Mo., announces the opening of the next term of his auction school for July 9 next. Colonel Graham has made a remarkable record as an auctioneer, particularly of live stock, and his ability is such that his school is an assured success. Live-stock selling is a distinct profession and a very honorable and profitable one. With the growth of the pure-bred live-stock industry a great field has opened up for young men of ability to enter the auction field. The well-known auctioneers in the live-stock field receive from \$50 to \$100 per day and expenses. Most of them are kept busy nearly all the year, though their busiest season lasts about nine months. Write to Colonel Graham for catalogue and information, and mention THE KANSAS FARMER.

A Strong Institution.

One of the Kansas institutions that should have the support of every farmer in Kansas is the Farmers' Alliance Insurance Company, of McPherson. The company was founded eighteen years ago by men who believed it their duty to emancipate the farmers from the grasp of the great insurance companies of the East, who were piling up fabulous sums of gold at the expense of the tillers of the soil. The company has steadily grown to be one of the greatest insurance organizations of the country. A company which furnishes insurance at actual cost, and which gives value received in return for the premiums which it receives.

The annual report for the year ending December 31, 1905, shows that they have over 80,000 members scattered all over the State of Kansas, resources

REMEMBER:

That from the 1st to the 10th of each month, Dr. Hess will furnish veterinary advice and prescription free

If you will mention this paper, state how much stock you have, also what stock food you have fed, and enclose two cents for reply. In every package of Dr. Hess Stock Food there is a little yellow card that entitles you to this free service at any time.

Instant Louse Killer Kills Lice.

amounting to over \$256,000, and that at the present time they are carrying over thirty million dollars of insurance risks.

The business of the Kansas Alliance Insurance Company is managed by a board of fifteen directors, five of whom are elected each year from among the policy-holders. The directors select annually from their number, the officers of the company. I. F. Talbot has been president and C. F. Mingebenck secretary of the company for a number of years, and it is largely through their individual efforts that this organization has been made a great success.

To those who are familiar with the methods employed by the old-line companies in the conduct of their business, and the vast amount of the policy-holders' money which is spent annually in paying unreasonable salaries to their officers, the mutual insurance plan should appeal, and if you want to have your risks written in a mutual concern you should insure in the Farmers' Alliance Insurance Company, of McPherson, Kans. Read their advertisement in this paper.

Kate's Sore Shoulder.

Kate was a faithful old horse, always ready to do her day's work on the farm—then, besides, if Aunt Molly wanted to go anywhere Kate was always harnessed up because she could be trusted. She kept fat until last spring. There was a lot of muggy weather in seeding time and Kate's shoulder got sore and she began running down fast.

Uncle Stephen was very busy and neglected the sore, mistaking Kate's willingness for a sign that the sore was not painful. One night he came to the kitchen door plainly worried and told Aunt Molly that he wanted some soap and water for Kate's sore shoulder. Aunt Molly was all sympathetic, but she said: "Soap and water is the worst thing you can use. Haven't you got some Gall Cure? Father never would be without it."

But Uncle Stephen didn't like to be reminded about how Aunt Molly's father farmed and so he persisted in his soap and water.

Meanwhile Kate's sore shoulder was raw and the patient horse was getting distressed and poor.

Aunt Molly was a wise woman. She said no more about the Gall Cure, but that night she darned Uncle Stephen's stockings with a hard ridge on the heels. Next evening Uncle Stephen limped to the house, nursing big water blisters on both heels.

"Try soap and water," suggested Aunt Molly. Uncle Stephen said nothing, but that very night he sent the hired man to town for a box of Security Gall Cure, and Kate's sore shoulder was well in a few days, and she did her full share of work all the time.

Good Words for Caustic Balsam.

Giltner, Neb., Feb. 15, 1905.
The Lawrence-Williams Co., Cleveland, Ohio:

For calloused shoulder, enlarged joints, wire cuts on stock, and burns on human flesh, I have never found the equal of GOMBAULT'S CAUSTIC BAL-SAM.

E. HERRING.

Silver Creek, Neb., Feb. 1, 1905.

The Lawrence-Williams Co., Cleveland, Ohio:

I have found Gombault's Caustic Balsam one of the best remedies used for blistering under the throat in cases of distemper. Also unexcelled when diluted with linseed oil, for warts, cuts and bruises.

C. H. LEE.

Toronto, Can., June 21, 1904.

The Lawrence-Williams Co., Cleveland, Ohio:

I have used Gombault's Caustic Balsam more or less for about twelve years and have had much success. The last bottle saved me about \$14 in my stock, and I fully believe that it cured

**Pigs At Weaning Time**

Stand a chance of slow development for a time. Grain or sour milk is harder to digest than the milk of the dam. The digestive organs require special aid at this time. As the feeding period of the hog is short—and the shorter the better—it is expedient to strengthen and build strong every digestive organ while the pig is young. Dr. Hess Stock Food, the great hog tonic, makes pigs grow fast, healthy and strong; expels worms, aids digestion and assimilation and causes the maximum amount of the nutrition to be applied to bone and muscle building. Stockmen must remember that it is not the food consumed but the food digested that produces the profit. Increasing the digestive capacity of stock of all kinds, according to the recognized medical authorities, can be produced by the action of bitter tonics, iron and other medicines such as are contained in

DR HESS STOCK FOOD

the prescription of Dr. Hess (M. D., D. V. S.). Remember it is equally valuable for Horses, Cattle, Hogs, Sheep and Milk Cows. It has the recommendation of the Veterinary Colleges, the Farm Papers, is recognized as a medicinal tonic and laxative by our own Government and sold on a written guarantee at

5¢ per lb. in 100 lb. sacks; 25 lb. pail, \$1.60.

Except in Canada and extreme West and South.

A tablespoonful per day for the average hog. Less than a penny a day for horse, cow or steer. If your dealer cannot supply you, we will. Dr. Hess Stock Book free, if you will mention this paper, state how much stock you have and what kind of stock food you have used.

Dr. HESS & CLARK, Ashland, Ohio.

Also manufacturers of Dr. Hess Poultry Panacea and Instant Louse Killer.



The Mayor of Kalamazoo.

At the spring election in Kalamazoo, Mich., Mr. William Thompson, vice-president and general manager of the Kalamazoo Stove Co., with whose business many of our readers are familiar, was elected mayor by an overwhelming majority, on a platform calling for "a square deal, equal rights to all and special privileges to none."

Mr. Thompson's popularity with his fellow-townsmen was such that the majority by which he was elected was larger than any mayor of Kalamazoo has received in many years. Commenting on his election the Kalamazoo Gazette says:

"William Thompson was elected mayor of Kalamazoo yesterday by a majority unprecedented in recent years in Kalamazoo municipal affairs."

"Last night, Mr. Thompson's progress through the streets was one continuous ovation, men and women of all shades of political belief, pressing forward to offer him their congratulations."

"The election was, of course, a personal triumph to Mr. Thompson, but in reality the congratulations should have been bestowed upon the city of Kalamazoo."

"The city is the gainer, for it is the city which will profit by this election. Mr. Thompson is a busy man. He is at the head and front of one of the most extensive enterprises in the city; he has in his employ hundreds of workmen; the products of the factory of which he is the head, go in single shipments to every nook and corner of the land. He keeps his hand on every department of his business, for he is a man who not only "does things" himself, but who sees that every department of business under his charge also does things, and does them right. He is the last man in the world to neglect a duty, and this record is a guarantee that Kalamazoo for the next year at least, will have that which was promised in the platform on which Mr. Thompson was elected—'A business administration.'

**Dipolene****WILL SAVE YOU DOLLARS**

By preventing loss and sickness among your farm animals, time to save is before loss occurs. Keep your live stock free from disease. DIPOLENE will do it. It kills disease germs, destroys ticks, lice, fleas; cures sheep scab, mange, eczema. Protects against mosquitoes, and keeps stock in a healthy sanitary condition. It's easy to use, powerful, sure and pure; DEATH TO DISEASE but perfectly harmless to animals, hair, feathers or wool. A gallon makes 100 gallons dip. Write for price and FREE book, "DIPPING FOR DOLLARS."

MARSHALL OIL CO., Box 13, Marshalltown, Iowa.

CHILlicothe Auction School

OPENS JULY 9, 1906

Instructed in nine branches of Auction Sales, including Live Stock Judging, by seven teachers. Write for particulars and terms.

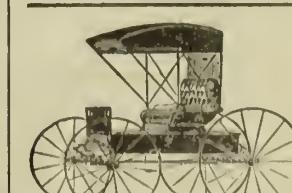
HARRY W. GRAHAM, Pres., Chillicothe, Mo. Live Stock Auctioneer

Qurollo's Berkshires

Herd Boar, Lord Bacon 87145

Strong boned, growthy, well finished pigs at low prices for quality. Also S. C. B. Leghorns of high quality. Take electric line from Kansas City, Mo. Home 'phone 2222.

James Qurollo, Independence, Mo.

Send for 84 Page Catalog

Buggies \$28.00

Harness \$5.60

Erhardt Carriage and Harness Co., Atchison, Kansas

Largest Good Corn Known

For forty years we have been perfecting the best corn in the world; have taken the leading premiums all the way from county to world's fairs. Pure white kernels $\frac{3}{4}$ inch long, 1-0 inches thick, nearly $\frac{1}{2}$ inch wide, 14 to 18 rows; ears foot long, guaranteed to make $\frac{1}{2}$ acre from any other, \$1,000 reward for sample of better. Pkt. 10 cents; 50 cents; 3 qts., \$1, postpaid, \$5 bid ex. Pkt. in Kansas in May. All you don't want to use, we will buy back in fall for filling Kansas orders. We offer liberal premiums. Reference Hank of DeSoto, Mansfield, Iowa. Order now or send for catalogue. M. O. payable Mansfield. No stamps. Address your order Square-Deal Seed Corn Farm, Cook, Louisiana.

Home Departments

CONDUCTED BY RUTH COWGILL.

The Man With the Hoe.

(Written after seeing Millet's world-famous painting.)

God made man in his own image, in the image of God made he him.—Genesis.

Bowed by the weight of centuries he leans.

Upon his hoe and gazes on the ground, The emptiness of ages in his face, And on his back the burden of the world.

Who made him dead to rapture and despair,

A thing that grieves not and that never hopes,

Stolid and stunned, a brother to the ox?

Who loosened and let down this brutal jaw?

Whose was the hand that slanted back his brow?

Whose breath blew out the light within this brain?

Is this Thing the Lord God made and gave

To have dominion over sea and land;

To trace the stars and search the heavens for power;

To feel the passion of Eternity?

Is this the Dream He dreamed who shaped the suns

And pillars the blue firmament with the light?

Down all the stretch of Hell to its last gulf

There is no shape more terrible than this—

More tongued with censure of the world's blind greed—

More filled with signs and portents for the soul—

More fraught with menace to the universe.

What gulfs between him and the seraphim

Slave of the wheel of labor, what to him Are Plato and the swing of Pleiades?

What the long reaches of the peaks of song,

The rift of down, the reddening of the rose?

Through this dread shape the suffering ages look;

Times' tragedy is in that aching stoop: Through this dread shape humanity betrayed,

Plundered, profaned, and disinherited, Cries protest to the Judges of the World,

A protest that this is all prophecy.

O masters, lords and rulers in all lands, Is this the handiwork you give to God, This monstrous thing distorted and soul quenched?

How will you ever straighten up this shape;

Touch it again with immortality;

Give back the upward looking and the light;

Rebuild in it the music and the dream; Make right the immemorial infames, Perfidious wrongs, immeasurable woes?

O masters, lords and rulers in all lands, How will the future reckon with this man?

How answer his brute question in that hour When whirlwinds of rebellion shake the world?

How will it be with Kingdoms and with kings—

With those who shaped him to the thing he is—

When this dumb Terror shall reply to God,

After the silence of the centuries?

—Edwin Markham.

What Is Worth While?

How seldom we stop to consider what is worth while! So easy it is to follow our impulses and to seek to fulfill our desires. Wealth and fame allure us; ease and luxury entice us; and we lose much of the real joy of life. We take the froth; we grasp the bubble; we are content with the hull and throw away the kernel. How many spend their entire life and energy ministering to their temporal wants alone, living to eat and wear clothes, laboring for that which satisfieth not.

The extremes to which mankind go in eating and drinking, in the use of extravagant and superfluous clothing is robbing them of the true pleasures. Is it worth while to live merely to satisfy these abnormal desires? The body must be properly clothed and nourished, and great care should be given it, for it is the dwelling place of the soul. But these material things should be subservient to something higher. The mind, the soul, is eternal. Is it worth while to go through life, spending one's energies for the body and robbing and staining the soul till it shrinks and dies? There are too many who are spending their lives laying up for themselves dollars—just dollars. Money is a good thing. It supplies many of the needs of humanity and satisfies many laudible desires, but it perishes, and a life spent just to amass wealth is a failure. Nothing seems to shrink the soul to a mere shadow like a life spent in such a way. It shows in the face. You can see nothing but dollars written all over it. Then there is the man who lives,

that he may get more land, more hogs, more cattle, and more horses.

It is worth while and is worthy of praise to acquire these things—but not to live for them alone, neglectful of the things that are eternal. Too little time is given to quiet, sober thought. The mind needs food that it may grow. One should try to read something helpful each day, something that will broaden the mind, and enrich the soul, and should endeavor by kindly acts and words to help another soul to grow.

It is worth while to take time to rest. I verily believe that some people think it is wicked to rest. There are two extremes, those who rest all the time and think it is degrading to work, and those who work all the time and think it is indolent and lazy to rest. A woman remarked to another that she lay down for a little rest every day, when the latter remonstrated, telling her not to do so as she would get into a habit. It is a splendid habit to get into. Even Jesus when on earth went into the wilderness or upon the mountain to rest, and His example is worthy of imitation. Nature also has her seasons of rest. In the long run, time and energy are gained by occasional rests.

It is worth while to cultivate cheerfulness and contentment because these attributes encourage the growth of the soul. It is worth while to get acquainted with nature, for it is the work of God, and to study His work helps us to know Him better.

It is worth while to keep alive the heart's affections; to practice the little courtesies every day, that not only make our own lives richer but inspire and encourage others. Many a heart has become shriveled and cold for the want of the sunshine of love from those with whom they are thrown in contact and because they have neglected the actions that are prompted by affection.

Too many married people neglect the culture of love, and alas! it languishes and dies. They think they have not time to waste in such foolishness. They must make a living. It takes no longer to say a word in a gentle and tender way than to be brisk and harsh. The tones of the voice say as much as the words. The home, when the husband is lover and the wife responds, is the home where there is peace and the children are themselves kind and affectionate. It is worth while to take time for these things.

Anything is worth while that makes for happiness and peace, that broadens the mind and expands the soul.

Children and Gossip.

It is often said that children are born mimics; and it is true that, with almost fatal facility, they follow the pattern that is set for them in the home. Since their wits are so keen, and their memories so retentive, it makes the mother's mission all the more difficult, especially in the matter of forming habits unconsciously. She must not only be sure that a child is learning to speak properly, but that the subject of his words is a proper one.

It is an easy thing to teach a child to gossip. When, for the sake of drawing forth quaint remarks, a mother encourages and even provokes little tales of playmates, she is cultivating in the child a loose tongue. To gain a child's confidence is one thing, and to let him believe you wish to hear trifling personalities is quite another.

Where shall a child learn careful discretion and a wise reserve in family matters if not in the home? He should never hear unkind comments or little private experiences detailed to casual visitors or in short-lived intimacies. Children are discerning and intuitive, and, if encouraged, will soon learn to pry upon their fellow creatures and keep a watchful eye out for the subject of an amusing tale.

One of the joys in a child's play is to surprise and astonish some one. They enjoy the applause of others, and, if this enthusiasm is aroused by relating some little happening in which a friend appeared to a disadvantage, it soon becomes his habit and pleasure to be on the watch for such things. The habit is hideously insidious, and will soon undermine a healthy nature.

An injudicious mother may, by mere thoughtlessness, lay the seed for this

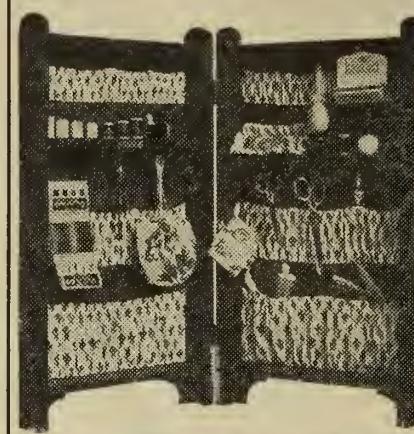
THE COMFORTER

A congested vein pressing on a nerve accounts for the swelling, throbbing ache of

Neuralgia**St. Jacobs Oil**

free the circulation, allays the pressure and soothes away the pain.

Price, 25c. and 50c.



It makes a splendid present

Send for free booklet to-day—it's so easy to forget it—and please mention Kansas Farmer

Her Majesty's Sewing Cabinet

"Enclosed find check for Sewing Cabinet. It is fully up to expectation and my wife is greatly pleased with my purchase." F. M. BUSHNELL, Cashier, Richland Savings Bank, Mansfield, O.

We receive such letters daily. There are no disappointments—it pleases them all.

This graceful, handsome piece of furniture is produced by the hands of careful, painstaking craftsmen in our own little workshop.

Each Cabinet is completely equipped with everything a woman needs to sew with, and here are fourteen pockets that hold all of her unfinished work—keeps all the sewing together. It's a perfect delight—"makes real pleasure out of real work"—and is just the thing any Kansas Farmer reader will enjoy.

Write for our free descriptive booklet with prices for the different styles, and also please tell us the color scheme of your sewing room that we may suggest a cabinet that will harmonize with its furniture, fittings and decorations. We pay the freight.

ART CRAFT WORKSHOP, 342 Dearborn Street, CHICAGO, ILLINOIS

habit-growth by asking too many questions, such as, "Where did your friend go?" or "What was your friend's mother doing to-day?" or, perhaps, "Who was calling when you were there?"

Such "leaders" will induce a child, who is pleased with attention, to run on beyond the border of good breeding, and, be it said with sorrow, sometimes beyond truth.

A mother who had fallen into this unfortunate habit of "title-tattle" conversation with her little girl, brought home a friend one day with whom she had been lunching. "What did you have to eat?" asked the child, innocently, and, when rebuked, replied, with tears, "You always ask me when I go anywhere."

In contrast to this, is another mother who was heard to say to her daughter, after a story of wrong words and bad temper had been told, "Don't let any one know about it, but try to help her break up the habit."

A wise and high-minded mother will let her children realize that she is not interested in personal stories, that they do not lead to further talk, and the child will soon choose something that does wake responsiveness. Being easily molded and anxious to please, they will soon learn to give out what is required of them, which ought always to be the best.—The Housewife.

Disparaging People.

There are people who disparage everything and everybody. They are constantly looking for faults and blemishes. There are homes where the children hear continual criticism from their parents, where the conversation is made up largely of adverse judgments of everybody and everything, where every character is dissected and the flaws rather than the good traits held up to view. Whether these judgments be just or not, the effect upon the children is the same—they learn suspicion, contemptuousness, and denunciation, three things quite unnatural to the child mind. As a result we have pessimists, made such not by harsh experiences of life, but by the habit of looking on the wrong side. Parents should remember that their view-points are those of the little ones, and will be theirs until each young life has its own experiences.

Impatient people water their miseries and hoe up their comforts; sorrows are visitors that come without invitation, but complaining minds send a wagon to bring their troubles home in. Many people are born crying, live complaining, and die disappointed; they chew the bitter pill which they would not even know to be bitter if they had the sense to swallow it whole in a cup of patience and water.—C. H. Spurgeon.

No one can do anything to-morrow.—Malthe D. Babcock.

AGENTS WANTED Sell \$1 bottle Barbasplilia for 25c, best seller; 200 per cent profit. Write today for terms. F. B. Greene, 115 Lake St., Chicago.

ANYONE WISHING **UNITARIAN PUBLICATIONS** SENT FREE, may address Mrs. F. O. Leland, Concord, Mass.

FREE BOOK Tells how to build Walks, Floors, troughs, cisterns, roofs, tanks, etc. Cheap, sanitary, everlasting. Given to any person sending 50 cents for a year's subscription to our practical paper. **ON CEMENT** **THE CEMENT ERA**, 207 Tolsona Bldg., Detroit, Mich.

A Harvest of Dollars The Ideal place for profitable investments is in the Ozarks. Write to-day. **The Ozark Mutual Town and Land Co.**, 527 Victoria Building, St. Louis, Mo.

More Money Made as Local Agent

FOR FARMERS **FIVE** **YEAR ACCOUNT-BOOKS**

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N. Y.

BARGAINS	Chinaware Sets, \$8.00 to \$12.00
Clothes Wringers, new	\$1.00
28 Pieces Table Cutlery, good plate	\$2.50
Sure-Cutter Shears and Scissors, 2 pairs	50 cts
Wade & Butcher Razor Strap and Bone	1.00
Box Medicated Toilet Soap	35 cts
Headquarter for Watches	75 cts to \$18.00
Black Gloss Buggy Paint, gallon	\$1.50
Gasoline Stoves, 2 burners	2.75
Poultry and Stock Foods, packet	15 cts
Cigars, per 100	\$1.50 to \$2.50
Washing Machines, none better	\$3.25
Send for Catalogue of many snap bargains.	
Agents wanted. New Process Mfg. Co., Dept. 50, Lincoln, Kans.	

**WANTED!**

An agent in every town to sell our fire-proof Safes. Big demand. Big profits. No practical experience needed. Write for particulars.

Alpine Safe Co., Ninth and Freeman, CINCINNATI.

Death of Floral Lawn Cause, Smothered by Dandelions

The dandelion pest has had its day. For one dollar you can get an instrument that can be used by women and children as well as men that will pull dandelions and other noxious weeds at the rate of one thousand an hour, and leave not a drop of dirt nor a visible tear in the sod. No stooping nor bending and is a pleasure not a task to operate it; delivers automatically the weeds pulled, and your hands are not soiled, nor your back tired, no grunting nor humping around to do your work. Pulls any dandelion or weed when tap root does not exceed 16 inches in length. Send one dollar and we will deliver free at your door.

The Standard Incubator Co. PONCA, NEBRASKA

The Young Folks**Do All that You Can.**

"I can not do much," said a little star,
"To make this dark world bright;
My silver beams can not pierce far
Into the gloom of night;
Yet I am part of God's great plan,
And so I will do the best that I can."

"What can be the use," said a fleecy
cloud,

"Of these few drops that I hold?
They will hardly bend the bly, proud,
If caught in her chalice of gold;
But I, too, am part of God's great plan,
So my treasures I'll give as well as I
can."

A child went merrily forth to play.
Put a thought, like a silver thread,
Kept winding in and out all day

"Through the happy, golden head;
Mother said, "Darling, do all that you
can,
For you are a part of God's great plan."

She knew no more than the twinkling
star,
Or the cloud with its rain-cup full,
How, why, or for what all strange
things are—

She was only a child at school.
But she thought, "It is part of God's
great plan,
That even I should do all that I can."

So she helped another child along
When the road was rough to her feet,
And she sang from her heart a little
song

That we all thought wondrous sweet;
And her father—a weary, toil-worn
man—
Said, "I, too, will do the best that I
can."

Our best! O children, the best of us all
Must hide our faces away
When the Lord of the vineyard comes
to look

At our tasks at the close of day;
But for strength from above—'tis the
Master's plan—
We'll pray, and then do the best that
we can.

—Margaret E. Sangster.

Fleetfoot; the Autobiography of a Pony.
CHAPTER VIII.—THE LAST DAY.

After the snow had melted from each
secluded spot and the spring had come
and was deepening into the full glory
of summer, the children began to talk
of "the last day." A vague fear came
over me when such a thing was men-
tioned, for I thought that by the last
day they had reference to the end of
the world. A sad experience such
would be for me who was enjoying life
so greatly to be called into some other
realm and find myself separated
from friends and old acquaintances.

My relief and pleasure were there-
fore excessive when I found that no
more serious casualty awaited us than
the closing of the term of school with
"appropriate exercises." For two or
three weeks before this remarkable
event the pupils were in such a state
of excitement in regard to their reci-
tations and dialogues that they paid
but small attention to me, who had
hitherto been their chief source of
amusement. Strange as it may seem,
my feelings were not hurt in the least
by the knowledge that I was being
overlooked and neglected; the only
trouble was the fact that I was getting
quite fat and lazy for want of exercise,
and by constant dozing under the
spreading branches of the big maple
tree in the corner of the yard. The
tree was so far from the school-
room that I missed much of what
was going on inside its walls,
but sometimes I could hear the sound
of the organ with the accompaniment
of many childish voices, and as the
clear notes rose higher and higher the
breeze wafted in my direction the
words:

"My country 'tis of thee,
Sweet land of liberty,
Of thee I sing."

The song went on and on, becoming
sweeter and more melodious as the
youthful singers caught the patriotic
ardor of the lines, and when the beau-
tiful song was finished the summer
evening was drawing to a close. I re-
member well how the air had become
a little cooler; from over the hill in
neighbor Gray's pasture came the soft
tinkle of bells as the well-trained cows
wended their way homeward. Off in
the distant timber a wild bird uttered
a series of warning cries, but near me,
all was silent and in my mind still
echoed the closing lines of the chil-
dren's song.

"Author of liberty,
To thee we sing."

I could not get away from the words
which impressed me so, for there, in the
hush of evening time the marvelous
influence of the Unseen had come over
me, and I, dumb creature though I
was, felt awed and wonder-stricken at
the perfection of His plan.

In due time "the last day" came.
About 7 o'clock in the morning Lyall,
arrayed in his Sunday's best, harnessed
me to the buggy with the conspicuous

red running gears, and in honor of the
occasion planted several small flags in
my bridle.

We had waited only a few minutes in
front of the house when out came Mar-
cella radiant in a pink dress and wide
hat of the same color, under the flap-
ping brim of which hung a thick gold-
en braid tied with a generous bow of
pink ribbon. She carried a potted
plant that looked cool and pretty with
its shining green leaves and tiny white
blossoms. She carefully made room for
it in the buggy and then Mrs. Dearcot
came out of another door with her
arms full of flowering plants of differ-
ent heights and constitutions. Some
looked dark green and robust, while
others had the sickly hue of the hot-
bed, whose chief charm, I suppose, lay
in their frailty.

Arriving at the school-house, we
found all the pupils in holiday attire,
and their number considerably in-
creased since the day before, for many
had brought younger brothers and sis-
ters that they might also enjoy the en-
tertainment.

The teacher and some strange young
ladies came into the yard and assisted
Marcella with the plants, while Lyall and Archibald Lamb took off my harness
in spite of the repeated requests
from the other boys for a ride behind
"the blue racer."

"Pony is not a green racer, anyhow,
young men," remarked Archibald,
blandly, "and I think it would be more
in order for you to retire and practice
reading your essays, 'Kindness to An-
imals' and 'Cruelty vs. Humanity.'" Thus upbraided the lads departed in
search of new fields to conquer, and when I was attended to, Lyall and Archibald joined them and in a short time the whole school was engaged in a vigorous game of "Andy-over" [antonio-over]. But while the fun was at its height the bell rang and the serious business of the day was taken up.

At recess I was again harnessed and
hitched to a trap which some one had
left on the road. This rig had a long,
narrow bed, and although it was very
light indeed, I was by no means proud
to find myself between the shafts. Lyall
was the driver and we started off
at breakneck speed in the direction of
home. We drew up at the hitching
rack and Lyall went into the house. He
soon emerged bearing two baskets and
his mama followed with one more.
Lyall hurried off again, returning in
a moment with a sack of apples. Just
as he came in sight I guessed what he
carried and he coming excited whinnied
repeatedly, which performance of mine
caused young master to laugh merrily
as he dived into the depths of the sack
and fed me as many apples as I could
eat.

After assisting his mama and little
Doris (who had by this time appeared
on the scene with a small jar of
pickles) into our odd vehicle, Lyall
turned my head around and away we
rattled down the road. But I was
much subdued by this time, for I
thought if Mrs. Dearcot was not humili-
ated by the experience I could
stand it very well.

As we turned into the school-yard I
could hear the clatter of dishes and
the sound of many voices. The scene
was a cheerful one, and it still remains
clearly in my mind. The long tables,
whose whiteness were relieved at fre-
quent intervals by bright bouquets of
late wild flowers, children running
here and there, more hindering than
helpful; women rushing in all direc-
tions with well-filled dishes; tall
school-girls laughing, chattering and
teasing one another. All were enthusi-
astic and wideawake; even the small
toddlers sang snatches of songs and
danced cake-walks for the amusement
of their elders.

The dinner was eaten in merriment,
and as I was not far away, every minute
or so some good-natured individual
would offer me chicken, pickles, or
fruit, according to his or her idea of
what was delicious. I had notions of
my own concerning the fitness of
things, and while some of the viands I
accepted gratefully there were others I
politely declined.

About 1 o'clock in the afternoon a
carriage drove up, and it was whispered
that the "county superintendent"
had arrived. Soon quietness prevailed,
and at the tinkle of a bell all were
seated on the long benches on the
shady side of the school-house. The
low-hacked organ was brought out
and placed under a giant tree. Songs
were sung, pieces were recited, and in
one affair called a dialogue, it appeared
that Archibald was in a great hurry
to catch a horse thief, and to my con-
sternation hastily slipped a hirle over
my ears and spurred me several yards
and back, at which performance great
applause was evoked. Even the super-

LOWELL INGRAIN CARPETS**"The all wool kind"**

We have been telling you for weeks WHY you ought to insist upon get-
ting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thou-
sands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier
to take care of; can be used on both sides, a great saving. LOWELL
INGRAINS are made that way; can be had in newest styles and colors, just
like high grade carpets. If it is wound on a hollow stick, it's a genuine
LOWELL INGRAIN.

When you buy carpets, ask the local dealer for
LOWELL INGRAINS. Look for the hollow stick
and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,**

New York

California

For a change why not make that visit to California early in the
season? You'll enjoy it. Visit Grand Canyon enroute. Stop over
and see the Petrified Forest. Ride through the country of fruits
and flowers. Attractive and inexpensive variable route tours
within the means of almost every one. About one-half the usual
rate. Long limit and liberal stop-over privileges. I'll help you
plan a trip. Tickets on sale April 25 to May 5, inclusive.

The Santa Fe is the line of fast trains, modern and comfort-
able chair cars and luxurious Pullmans, Harvey meals, rock-bal-
asted track, block signals.



N. B.—Members of the Mystic Shrine and delegates to
National Congress of Mothers, both to be held in Los Angeles
between May 7 and 11, should take advantage of this offer
Descriptive folder free.

M. L. KING, Agent,

Topeka, Kansas

Cheap Excursions Southwest

**Low Rates each first and
third Tuesday, monthly**

Round-trip tickets sold from nearly all Rock
Island points in the North and Central West to
practically all points Southwest.

Rate about half the regular fare.

Pluck means sure success in the Southwest. An illustrated
book or two will help you to a better acquaintance with the
country. I'll be glad to send them on request. State the section
which most interests you.

**A. M. FULLER, C. P. A.**

TOPEKA, KANSAS

Topeka Business College

The school that educates you for business success and that always gets
you a good position. Students enroll at any time. Work for boards if you
wish while attending school. Competent persons always in demand at good
salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

intendent seemed to enjoy it immensely. One of the numbers proudly announced by the teacher was, "Playing Go Sce, by two little girls." The two little girls in question proved to be Marcella and her bosom friend, Daisy Floyd. I hoped it would be a success for Marcella's sake, and I was not disappointed. Very quaint and sweet the pair of little lassies looked in their spectacles and long dresses, and the grown up language that they used was simply admirable. When the buzz which followed this act subsided, the superintendent arose, and after talking earnestly to one boy and three girls, who stood in a respectful row, he gave them each a white piece of paper, and then the secret came out. Those four young people were graduates of the eighth grade! After that the whole school (superintendent included) sang a stirring song which sounded like "Auld lad is sighing."

Then every one shook hands and congratulated the others on the part they had taken. The evening shades began to fall as we left the school-house which now looked lonely and silent.

Again there were "good-bys," and as the gate swung finally on its rusty hinges I am nearly sure that all of my friends felt as I did, "A joy akin to sadness," in bidding farewell to the last day.

The Little Ones

Jack's Plowing.

Out in the field in the sunshiny weather Jack and the farm-boy are plowing together. The dandelions in bloom by the wall twinkle gaily at Jack; and the robins call From the apple-tree boughs, "Ho, Jack! look here!" While the chipmunks are chattering, "Come, Jack, my dear!"

Put Jack keeps on with his plowing. The plow is high, and the dimpled hands Must reach for the handles, 'twixt which he stands. The south wind lifts the loose brown rings 'Neath the sailor hat with its flying strings, And kisses the lips pressed tightly together, When out in the fields in the sunshiny weather

Jack lends a hand with the plowing. Up and down the long furrows brown He manfully trudges, a tiny frown On the smooth broad brow, so earnest is he. "We has such lots of work to do, Jim, hasn't we?" If I didn't help you, now what would you do?" Says Jim. "Master Jack, if it wasn't for you, I'd never be done with the plowing."

The sun grows hot, the lazy breeze scarce stirs the houghs of the apple-trees. The soft earth clings to the moist little hands, When at last, at the end of a furrow, he stands And looks toward home. "My mama, I guess, Will be 'fraid 'though a man in the house, unless I did come home from plowing."

Such a dirty boy as runs home at last! Such a dirty boy! but mama holds him fast, And kisses the dimples that come and go As he tells of the morning's fun, till, lo! The white lids droop o'er the eyes of brown, And in the meadows of Slumber-town Jack still goes on with his plowing.

--Mabelle P. Clapp, in Zion's Herald.

A Kitten Story.

The Schnabel children were the owners of a very fine old cat, which had a very enterprising family of kittens. A little while before we came away they presented us with one of these kittens; and it was in our parsonage for several weeks. When we came to move, we gave it back to them again: and it was very laughable to note the perplexity of that little cat on account of the change of language. When the Schnabel children would call the kittens to come to their dish of milk, they used some German words to attract them, whereupon all the little German cats would scamper away to their meal; but the little adopted one that had learned English would stand off by itself, the very picture of loneliness, until the "Come, Kitty," was spoken to it in good English--Christian Endeavor World.

"Leave nothing to what is called 'luck' and you will generally be what is called 'lucky.'"

"Listen to others, pro and con, then use your own judgment. Final success is due to independent good judgment."

A Food to Work On

Work! Work!! Work!!!

Lots of energy is needed to keep up the pace. In the struggle, the man with the strong body and clear brain wins out every time.

The man of to-day needs something more than mere food; he needs a food that makes energy--a food to work on.

Although some people may not realize it, yet it is a fact, proved and established beyond doubt, that soda crackers--and this means **Uneeda Biscuit--are richer in muscle and fat-making elements and have a much higher per cent of tissue-building properties than any other article of food made from flour.**

That this is becoming known more and more every day is attested by the sale of nearly 400,000,000 packages of **Uneeda Biscuit, the finest soda cracker ever baked. An energy-giving food of surpassing value--sold in a package which brings it to you with all the original flavor and nutriment perfectly preserved. Truly the food to work on.**

Whoever you are--whatever you are--wherever you work--Uneeda Biscuit**.**

NATIONAL BISCUIT COMPANY

5¢

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalito Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marion County (1902).
Women's Country Club, Anthony, Harper County (1902).
Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1902).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
West Side Study Club, Delphos (1906).
Domestic Science Club, Berryton, Shawnee County (1906).
Mutual Improvement Club, Vermillion, Marshall County (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

ART PROGRAM.

Jean Francois Millet.

- I. Millet's life at Barbizon.
- II. "The Angelus."
- III. "The Man With the Hoe."
- IV. Reading: "The Man With the Hoe."

I. Barbizon is familiar to those who have been using the art programs, as a quaint little village in the forest of Fontainebleau in France, the camping ground of artists. In the last of these

art programs Millet was left in Paris with a second wife and a growing family. It was on the eve of the Revolutionary War, and he was extremely poor. The cholera broke out and he decided to leave and come to this quiet and picturesque place, to which he and his family had to walk. Here he was happier near field and forest, but necessity compelled him to work from morning till night. He remained in this place twenty-six years--the rest of his life.

II. Almost every one has seen a copy of this famous picture--"The Angelus." Once seen it can not be forgotten. There is something entrancing about it. The father is standing cap in hand, his head bowed; the mother bowed and hands folded, at the sound of the evening bell that calls for prayer. It is said that this picture represents the three chief factors of life--labor, love, and worship. This picture was first sold for one hundred dollars, dire necessity, but later brought the highest price of any modern picture.

III. This picture, "The Man With the Hoe," is not pleasing to look upon but it is very interesting and true to French peasant life. Weary with toil he has straightened himself up and is resting his weight with his hands upon the hoe for a moment, to breathe.

IV. This poem, which is printed in the Home Department this week, may be read in connection with the study of this subject. It is interesting to know what Edwin Markham thought as he studied the picture. He is an American poet and lived in California the early part of his life and began to write poetry for a California paper at a very early age. This is his best known poem.

Domestic Science Club.

A club has been organized at Berryton, known as "The Domestic Science Club," which holds its meetings every two weeks at the home of the members in alphabetical order.

At the last meeting a program was rendered consisting of roll call, answered with items of interest to the housekeeper. The following papers were then read: "Housekeeping and Home-Making," by Mrs. C. A. Kline; "Hygienic Care of the Bedroom," Miss Lucy Popenoe; talks on "Germs Most Common in the Home,"

CHEAPER FARM LAND

SOUTHWEST OFFERS BEST OPPORTUNITIES FOR SECURING HOMES

Many farmers in the Northern and Eastern States are selling their high priced lands and locating in the Southwest. Many who have been unable to own their homes in the older country are buying land in the new country.

Unusual opportunities exist along the lines of the Missouri Pacific-Iron Mountain Route. The rich, alluvial, delta lands and river bottom lands of Southeast Missouri, Eastern Arkansas, Louisiana, and Texas, capable of producing 60 bushels of corn, 150 bushels of cotton, 4 to 6 tons of alfalfa, 150 bushels of potatoes, and other grains, vegetables and hay crops, can be bought for \$7.50@15 per acre. When cleared and slightly improved will rent for \$4@6 per acre cash.

Uplands more rolling, lighter soil, adapted to fruit-growing--peaches, pears, plums, grapes, berries--also melons, tomatoes, and other vegetables, can be bought for \$5@10 per acre in unimproved state. Many places with small clearings and some improvements can be bought very cheap.

This is a fine stock country. No long winter feeding. Free range, pure water, mild climate. A healthy, growing country, with a great future.

Write for map and descriptive literature on Missouri, Arkansas, Louisiana, Texas, Kansas, or Indian Territory. Very cheap rates on first and third Tuesdays of each month.

Address,
C. D. BOYD, T. P. A.,
Indianapolis, Ind.
or H. C. TOWNSEND, G. P. & T. A.,
St. Louis, Mo.

Farmer's Account Book and Ledger

Saves time and labor--a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the KANSAS FARMER one year, both for only \$2.50. Address,
THE KANSAS FARMER CO.,
Topeka, Kans.

Combination Thief - Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

Mrs. J. C. Banta; and the "Arrangement of an Ideal Apparel Closet," Mrs. Mac. Quail.

At the next meeting roll call is to be answered with spring-time poetry. "Beds of Our Forefathers" will be read by Mrs. Harvey Faust, with a display of old quilts, spreads, and sheets. The following papers will be read: "Care of the Cellar," Mrs. E. W. Adams; "Moths," by Mrs. A. A. Adams; after which will follow the review of "The Review of Reviews," Mrs. Chas. Oneals; and special music.

The committee is to arrange a program for the coming two months. Lunch, consisting of three articles, is allowed to be served at each meeting.

L. MABEL WATERS, Sec. and Treas.

Another new club has been added to our Club Roll—"The Domestic Science Club," of Berryton. I am always glad to hear of new clubs, especially this kind, for I know that means better wives, better mothers, better homes, and frequently better men and women in the future generation.

The State Federation of Women's Clubs will meet at Lawrence the second week in May, beginning with the 8th and continuing to the 11th.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animals, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of The Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in The Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across the top of letter: "To be answered in Kansas Farmer."

Ailing Steer.—I have a steer, among some I am feeding, that refuses to eat corn at all; he did not get stiff; keeps jumping out of corral, and slobbers all the time and is poor; he has been this way for a month.

Answer.—From the symptoms given would think that the steer had some teeth that were giving him trouble, and would have the animal's mouth examined by a competent veterinarian. There may be some foreign substance lodged in the tongue or cheek.

Swelling on Mare's Side.—I have a 7-year-old mare that has a swelling on one side just behind girth, that appeared first last fall. It kept getting larger until it reached the flank and extended to forelegs and breast. She got very stiff; punctured the swelling in several places and clear water came out until the swelling went down; used saddle on her before it healed inside, and it swelled again; it kept swelling until it broke, and discharged about 2 quarts of pus; it has never gone clear down since. She keeps fat easily, and feels good.

Answer.—I think the condition of your animal originally was a dropsical one, and later developed this condition of pus formation. I would advise you to continue the use of condition powder, and heal the sore by using a good local disinfectant.

Mare with Stiff Foot.—My 13-year-old brown mare has a stiff right foot; the whole foot seems to be so stiff that she can't lift it over anything, and if it is wet is much worse; if she has to pull it out of the dirt she gets helpless in that foot. I used a little blue stone water on it, but it didn't seem to help it. What would you advise?

Answer.—I would advise using a poultice of antiphlogistine on the stiff foot. Change the poultice as often as it gets dry, and I think you will have no trouble in removing the stiffness.

Horse Out of Condition.—I have a bay 10-year-old horse that does not thrive, and is getting thinner all the time. His hair is not in good condition. He eats heartily, but is not doing well. Weighs 1,100 pounds.

Answer.—I would advise you to have the horse's teeth floated, and then give the following condition powder: One ounce of pulverized nux vomica, 2 ounces pulverized gentian, 2 ounces pulverized iron sulfate, 4 ounces common salt, 6 ounces pulverized glycyrrhiza root, 2 ounces fenugreek; mix well with 10 pounds of oil-meal, and give a heaping teaspoonful night and morning in ground feed.

Actinomycosis (Lump Jaw).—I have a 5-year-old steer that has had a lump on his jaw for a year. Please give me a remedy.

Answer.—Would advise giving potas-

sium iodide internally in half drachm doses daily, for ten days, then withhold for three or four days and give again; give the potassium iodide in half a pint of water. Open the lump on the jaw freely, and inject tincture of iodine daily into the cavities.

Indigestion in Colt.—I have a 2-year-old colt that has never done well since being weaned. Hair is thick and fine, very thin in flesh, appetite good; drinks a good deal; seems uneasy; lies down a great deal, and at night moves and stamps her feet as though in pain. Last summer she broke out with little pimples like fly bites. Eyes are bright and she is always ready to eat. What is the trouble with her?

Answer.—You can hardly expect favorable results in treating your colt for several weeks as the trouble has been of long standing. I would judge that the animal had indigestion, and would recommend the following tonic: One and one-half ounces of nux vomica pulverized, 2 ounces pulverized gentian, 4 ounces pulverized iron sulfate, 2 ounces pulverized fenugreek, ½ pound sulfur, 6 ounces common salt, 8 ounces pulverized glycyrrhiza root; mix well with 10 pounds of oil-meal and give an even teaspoonful night and morning in ground feed; withhold the tonic for three or four days every four weeks, then begin again.

Warts on Calf.—I have a calf that is getting some warts on head and neck. What can I do to get rid of them?

Answer.—I would advise cutting the warts off; then burn the raw surface with a hot iron and heal the wounds with some of the common disinfectants you may have on hand.

Scours in Calves—Enlarged Knee Cap.—Had two calves take scours before Christmas; one got so weak it could hardly get up, but finally got all right. The other is worse than ever now. What is best to feed him? Have given him egg and flour. How shall I treat him?

Also have a horse that spit the hide on knee cap; it spread open and the leaders became inflamed; it healed well but is enlarged a good deal. Is it too late to help with a blister?

Answer.—I would advise giving the calf half a pound of epsom salts dissolved in a quart of water; 12 hours after giving salts give a teaspoonful of tincture of opium in a cupful of scalded milk. Repeat the dose of opium in twelve hours if the scours are not checked by that time.

It may pay to blister the enlarged knee cap, even at this late date, as it may reduce the swelling on the horse's leg.

Lame Pigs.—I have a brood sow with pigs that I turned on the alfalfa; in a week she got lame in one hind leg; she can hardly get up, and will not eat. I turned some other pigs in the next day and one of them is the same way. What is the cause and a remedy?

Answer.—I am unable to tell the exact cause of the lameness unless they have had too much alfalfa. Would advise taking them off the alfalfa and see if that will not remedy the trouble. Digestive disorders will often bring about the symptoms you mention.

Indigestion and Paralysis.—What is wrong with my pigs? I have 9 head of pure-bred Chester Whites about 3 months old. I fed them ship stuff with corn-chop in slop all winter. Ten days ago I turned them onto a 100-acre wheat and pasture land; they were all fat and thrifty; three days ago I noticed something wrong as they came up in the evening; they would suddenly drop to the ground with front parts, get up and walk a few feet and drop again. They are very jerky and seem sore about the shoulders. Have taken them off the wheat but they seem no better. I have given a little turpentine in the slop. What is the trouble and a remedy? A. D. H.

Sumner County.

Answer.—I think the trouble is a digestive disorder, and paralysis brought about by feeding too much corn. Would advise using bran and ground oats in the slop; better give the pigs an absolute rest from a grain ration for about a week, before you begin giving the oats and bran.

C. L. BARNES.

The Alpine Safe and Lock Co., of Cincinnati, Ohio, are making an article of great value to every farmer. This is a fire-proof safe. They are made in all sizes and prices to suit. Valuable papers and cash may be preserved in a good steel safe against loss by fire or burglars, and the cost of the safe is comparatively small. The Alpine Safe and Lock Co. is now advertising for agents to sell their safes and vaults. They offer good pay and require no previous experience. Here is a chance for a good man who wants to make good money. Mention THE KANSAS FARMER when you write.

Amatite ROOFING

No Repairs. When you roof your buildings with Amatite, your first cost covers *all* cost. After it is put on you can forget all about it, for it will require no repairs—painting, patching or tinkering of any sort—for many years. If your Amatite roof costs you \$10.00 to begin with, the cost ends there. And it is all because it is made to *wear* and does not rot, crack or peel off in a few years.

Send to our nearest office for free sample, and see for yourself how much better it is than the ordinary kinds.



BARRETT MANUFACTURING COMPANY,

New York Chicago Philadelphia Allegheny Kansas City New Orleans Cleveland

St. Louis Cincinnati Minneapolis Boston

BUILT TO BAKE—TOLMAN RANGES



Would you hesitate to buy a stove or range of us by mail if you were confident you could save \$15 to \$40 by so doing, and at the same time run no risk? That is exactly what we are offering you. A stove or range second to none in the world at a price far less than your local dealer can even buy such a range. We are able to save you many dollars, in your range-buying for three reasons, viz.:

1. Our direct selling plan, from factory to family (one profit).

2. We have a perfect factory and foundry of our own.

3. We have the experience of over twenty-three years.

For durability, economy, and baking qualities, our Tolman Ranges are unsurpassed. They are made from the very best of material, by skilled workmen, in our own factory. The ovens are large, square, perfectly ventilated, and fitted with oven thermometer, which prevents any waste of fuel from overheating the oven. No one has ever yet disputed the fact that Tolman Ranges are absolute range perfection. We challenge comparison.

We do not claim that we manufacture the only good range on the market to-day, but we do say, we will sell you a stove or range, far superior to any other on the market to-day, at a price far lower, and terms fairer than those offered you by any other stove manufacturer or dealer.

It is a well-established business principle to buy where you can buy the cheapest. QUALITY CONSIDERED. Your home merchants do this EVERY TIME. Not one of them will pay you a cent more for the articles you offer them than they can procure the same thing for of OTHERS, WILL THEY?

Then why pay your local dealer fifteen to thirty dollars more for a range than you can procure a better article for of us? Our "FACTORY TO FAMILY" plan enables you to buy of us by mail safer than of your local dealer.

We have pleased customers in nearly every county in the United States. Their letters show that we saved them money and gave them entire satisfaction. We know that we can give you satisfaction and save you money. You run no risk because we ship on

ONE YEAR DECISION TRIAL AND GIVE YOU A TEN YEAR GUARANTEE.

Our large free catalogue tells how steel ranges are made. Why some are good; some are bad, and how to tell one from the other. It tells you why you can buy of us by mail without risk and how to save the dealers' profits. Our free catalogue illustrates why our Tolman Ranges are "BUILT TO BAKE;" moreover, how a Tolman Range will cut your housework and fuel bill in half. It will pay you to investigate. SEND FOR CATALOGUE E TO-DAY, AND SAVE DOLLARS.

JUDSON A. TOLMAN CO.,

7738 Woodlawn Ave.

CHICAGO, ILLINOIS



EXTREMELY LOW RATES

To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

FOR SALE THE UNCLE SAM OIL-GAS BURNER

Asphalt, kerosene for good roads and streets; crude oil for fuel, lubricating, or painting; gas, fuel-oil and water white kerosene of high-grade. All anti-trust independent products by barrel or carload.

W. F. RIGHTMIRE, - 216 The Drive, - Topeka, Kansas

Miscellany

That College Y. M. C. A. Building—Select Your Place in Table Below.

The following extract from a letter written by Mr. J. P. Anderson, of Agenda, is worthy of reflection:

"Having thought for some time to send my mite to you for the Y. M. C. A. fund, now after reading the letter of Mr. Dukelow, I will forward it at once. No doubt a great many Kansas farmers feel willing and able to help this worthy cause but yet continue to delay, and some will even forget."

There is no doubt as to the ability of the farmers of the State. They have been prospering year after year and no class of people is better able to contribute. Mr. Anderson states that there is also a willingness among the farmers to "help this worthy cause" but the trouble lies in the fact that they will "continue to delay, and some will even forget." "Everybody's business is nobody's business" is an old saying, and applies to such a canvass as is being carried on in this paper. The problem is how to get those interested in the canvass, who are also able to give, to do so immediately.

The following table of suggested donations may help some to choose the amount suited to their ability and interest:

SUGGESTED AMOUNTS FOR THE RAISING OF \$10,000.

No. of Subscriptions.	Amount.	Total.
20.	\$100	\$2,000
20.	50	1,000
40.	25	1,000
200.	10	2,000
600.	5	3,000
Miscellaneous gifts.		1,000
		\$10,000

The object of this canvass is to interest a large number of different people throughout the State. If farmers do not respond quite generally, there will be but one other way to raise the amount, and that will be to prevail upon some individual to give the entire sum needed. Several colleges and universities have been fortunate enough to interest some such person. Among them may be mentioned Mrs. A. T. Stiles, who gave \$30,000 for a building at the University of California; William E. Dodge, \$55,000 to Princeton University; Mr. and Mrs. E. B. Monroe, \$60,000 to Yale; Mr. A. S. Barnes, \$45,000 to Cornell; and Mrs. Helen Close, \$10,000 to the University of Iowa. The chances for getting some such donor to give to the Y. M. C. A. at the Agricultural College seems small and it might take months to find one. The only sure way is for a large number of the farmers of the State to respond quickly and liberally.

The following have sent in subscriptions to the fund:

Previously acknowledged.	... \$22,805.50
W. R. Stubbs, Lawrence.	100.00
J. P. Anderson, Agenda.	5.00
Alvah Sheldon, Eldorado.	1.00
L. D. Connell, Altoona.	2.00
R. N. Richardson, Altoona.	5.00
Thos. D. Hubbard, Kimball.	5.00
S. G. Painter, Beverly.	5.00
Albert Rundie, Stafford.	1.50
E. A. Croll, St. Paul.	2.96
Mrs. F. B. Healy, Tyrone, Ok.	2.00
"Friend," Richland.	1.00
Total.	... \$22,935.00

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, 1906, Davis W. Clark.)

SECOND QUARTER. LESSON VI.

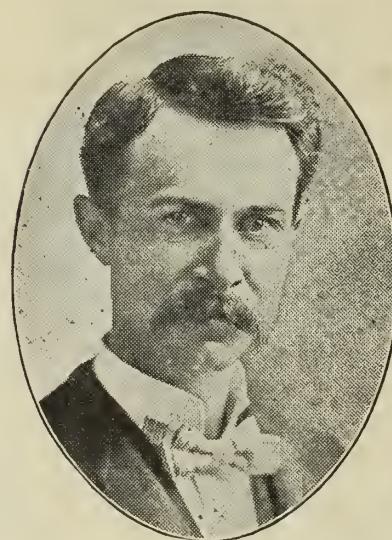
Matthew 13:24-30; 36-43. May 6, 1906.

The Parable of the Tares.

It is true yet in a sense that without a parable Jesus does not speak to the world. His whole system is a dark saying to the human mind naturally. Open eye, attentive ear, understanding heart, alone apprehend His meaning. There is need of moral earnestness which cries: "Explain to us the parable." . . . The parable of the wheat and tares is fundamental. It has been called a "brief and simple moral history of the world." It contains "the ground question of the philosophy of all times relating to the origin of evil." . . . The parable asserts that there is no existence of good or evil in this world apart from personality. Moral qualities have human souls as their only sphere. Virtue and sin root and bring forth fruit in men. Thus Jesus says, "The good seed are the children of the kingdom, but the tares are the children of the wicked one." . . . Those who with the docility of children have come to Jesus, to learn of Him and have His kingdom set up within, have become the wheat with which the Lord has sown the earth. So the tares

are the children of the wicked one. Evil roots itself in human souls. . . . As we look out and see a thousand million growing together as wheat and tares in this vast field, this age-long antagonism, this dread and poisonous admixture, we exclaim in language of the servants of the householder, "Didst thou not sow good seed? From whence hath it tares?" Jesus dismisses this purely speculative question with the declaration, "An enemy hath done this."

After a thousand volumes have been written on the origin of evil, we shall just know as much of it as Christ has told us here. Sin is here. Its deadly effects are apparent. The question is not so much, "How did sin get into the world?" as "How may we get it out of the world?" Jesus cautions the disciples against an attempted mechanical and forcible purification of the world. "Let both grow!" What rivers of blood would have remained unshed had the church always been guided by the teaching of this parable! . . . The present is a probationary period, in which change of character is possible. As St. Augustine suggests, "Those who are tares to-day may be wheat to-morrow." Again the opportunity is afforded to prove one's goodness genuine by steadfastness. As Daub affirms, "The enemy can put into the wheat the tendency to become tares." Only at the end of one's probation, when full proof of goodness or badness is made, can a final separation be effected. This will be done by the hand of Omnipotence, guided by unerring wisdom. . . . The general judgment is the official announcement, in the court of heaven and to the intelligences of the universe, of the destiny each soul has made for itself in its probationary state. . . . Then shall the righteous shine forth as if up to that time they had been under a cloud in their present unavoidable association with the evil.



J. T. WILLARD.

Director Kansas Experiment Station, and Professor of Chemistry, Kansas State Agricultural College.

In length of service in the college, Professor Willard is excelled by Professor Walters only. He is a graduate of the college in whose service he has labored so long. When he left his father's farm in Wabaunsee County to enter college he could not foresee the demand that the State would make for a life of service in a work wherein his rigid accuracy of thought, work, and statement is of the utmost importance.

The ninth annual announcement of the Colorado Chautauqua at Boulder, Colorado, has just come to our desk. It is the most complete book of its kind the association has ever issued, containing detailed information regarding railroad excursions, carriage drives, mountain climbs, natural scenery, platform program, summer school courses, living expenses, cottage and tent rentals, and many other items of interest to all prospective tourists. The book is highly artistic, the cuts being printed in two colors and the cover in three. In fact, we believe it to be the handsomest Chautauqua announcement we have ever seen. The book is free to all who are contemplating an outing in Colorado. The Assembly opens July 4 and continues five weeks.

Manure Doubled in Value.

The American Harrow Co., of Detroit, one of the oldest concerns engaged in the manufacture of agricultural implements, claim that their American Manure-Spreaders doubles the value of every bit of manure put on a piece of land.

The American Spreader breaks the manure up so fine that it is mixed in with the soil at once instead of lying on the surface in lumps to be broken up by time, weather, and cultivation.

Certainly this claim is a sensible one, and, to prove its truth, the American

Harrow Co. offer to let any responsible farmer use one of their Manure-Spreaders a month **FREE**. Their plan is to send you a spreader (freight prepaid) and you can take it home and use it a month just as if it was your own—bought and paid for.

If you don't find the spreader exactly as represented, all you have to do, at the end of the month, is to take it back to the railroad station and tell the agent to ship it on to the American Harrow Co. at their expense. You don't pay anything for the month you have used the spreader. That part of it is **FREE**.

If you do find the spreader as claimed by the American Harrow Co. offer you long-time terms—practically whatever time you wish—to pay for the machine.

No offer could be fairer than this and these people sell all the manure-spreaders they can make on the same plan.

This plan is very popular with farmers because the American Harrow Co. can be depended on to do exactly as they agree.

Judging by the tremendous increase in their business during the past few years, these American Manure Spreaders must be about the best going. At any rate, the makers offer the best kind of prof of their faith in them.

They have just had printed a new Manure-Spreader catalogue which is probably one of the handsomest books ever issued by an agricultural imple-

ment concern. The cover of the book is rough, heavy, seal paper embossed in raised letters with the word "American" in shining black on a bright red background. Every farmer should have a copy of this book in his farm library for the valuable information it contains. You can get it **FREE** for the asking.

Drop a line to the American Harrow Co. to-day saying you want it, and it will come by return mail postpaid.

Address American Harrow Co., 10130 Hastings Street, Detroit, Mich.

Important Tests of Binder Twine.

With the coming of summer, the careful grain-grower begins to think of harvest time. He long ago learned that it does not pay to postpone all his plans until the rush of the harvest season is full upon him, and there is no time to think—no time for anything but fast, hard work.

It will not be many weeks—not many days as a matter of fact—until "the sound of the reaping machine will be heard in the land." And with the thought of this comes one of the most important questions of the time—binder twine.

Probably no subject is of more practical interest to the grain-grower. It is one of the many matters of detail of farming that become "big things" at one time and another.

The binding twine may not be thought as important as the harvesting machine all the year round. But on its good qualities depend largely the success of the harvest. If it breaks, it stops the whole procession.

Its strength or weakness may mean the saving or loss of many dollars not only in money but in time.

It is therefore not remarkable that the merits of the various binder twines on the market have been the subject of so much discussion not only in the farm papers, but among grain-growers wherever and whenever they get together at this season.

In this connection, the International Harvester Company announces the result of some interesting tests.

Twines of four makes—the International and three others—were taken for comparison by measurement, and trials of strength.

It was shown that the International ran to 503.8 feet to the pound, while the other twines averaged from 467.2 down to 452.3 feet to the pound.

Ten balls of twine from each lot were tested for strength.

A capacity for supporting fifty pounds is regarded as the standard, experience having taught that twine that breaks at less than this strain is not reliable in the field.

Figures for the test of strength show that while the International twines averaged a capacity for standing 59.9 pounds, one of the others barely reached standard strength (50 pounds), and the other two fell short from 2.7 to 4.4 pounds.

Grain-growers generally will be interested in these practical tests, as both amount and quality of twine bought for the approaching harvest are matters on which full information will be desired.

The De Laval Booklet.

The De Laval Separator Co., of New York and Chicago, have lately issued a beautiful little booklet descriptive of the latest styles of their cream-separators. This little book is full of information and may be had free by addressing the Chicago office. This reminds us that, if there is any one page of THE KANSAS FARMER that is more attractive than any other, it is that on which appears the dairy advertising in which that of the De Laval Separator is always prominent. This is a money-making page for the farmer, and our pride in it lies in the fact that everything named there is clean and honest. There are no tin-can "separators" or other devices advertised to separate the farmer from his money without giving full value in return.

The De Laval Separator has long been before the public, and the fact that there are now in daily use about a quarter of a million of these valuable machines speaks volumes for their popularity and usefulness.

Look at the remarkable offer of buggies and harness made by the Erhard Carriage & Harness Company, of Atchison, Kans. This is an old, reliable firm that has been doing business for many years. Just now they have some especially attractive bargains. Think of it. A buggy for \$28 and a harness for \$5.60. They have all classes of buggies and harness at all prices, but they always have bargains. Drop them a line and mention THE KANSAS FARMER.

CONGO ROOFING
TRADE MARK

The best Ready Roofing you can buy. It's easy to lay, attractive, durable, water-proof. Can be used anywhere under the sun and will give the best of service. Snow, heat, rains and storms do not affect it. A Sample will prove its worth. Write today and then test it yourself.

BUCHANAN-FOSTER COMPANY,
448 Chestnut St., Philadelphia, Pa.

A Home For Half the Money

In the Pacific Northwest. A handsomely illustrated 88-page book,

"OREGON WASHINGTON IDAHO AND THEIR RESOURCES"

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig,
ROOM 212 WORCESTER BLDG.,
PORTLAND, OREGON.

The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS

STARK FRUIT BOOK
shows in NATURAL COLORS and accurately describes 216 varieties of fruit. Send for our terms of distribution. We want more salesmen.—Stark Bros., Louisiana, Mo.

SEEDS That will Grow **PLANTS**
No better, even at the high prices. Special bargain: SEEDS, 10 pds. Annual Flowers, 10c; 5 pds. Vegetables, 10c; PLANTS, 6 Boxes, 25c. Geraniums, 25c; 6 Begonias, 25c; 25c. My catalog price will surprise you. Catalog and packet Royal Giant Peas free.

A. C. Anderson, Columbus, Nebraska.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamington and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bushel. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Ill.

World's Premium Seed Corn, HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri

Horticulture

The San Jose Scale in Kansas.
PRESS BULLETIN NO. 150, ENTOMOLOGICAL
DEPARTMENT, EXPERIMENT STATION,
KANSAS STATE AGRICULTURAL
COLLEGE.

While no systematic survey of Kansas has been made to ascertain the absence of the San Jose scale in the State, the evidence available to date has given the impression that the pest has not occurred to any recognizable or at least serious extent within our boundaries. The testimony of orchardists and nurserymen in convention in the various horticultural meetings, the reports of those engaged in the inspection of nurseries so far as this work has gone, and the correspondence of the entomologists in the State schools has not disclosed the presence of the true pest, and many supposed cases have been ascertained by competent students to have been other forms of injury.

A month ago, however, there was received at the Kansas Experiment Station, from Mr. B. S. Williams, of Dodge City, an apple twig, crowded with the true San Jose scale, and as the indication was that of a seriously infested tree, a visit to the locality was made to determine the extent of the attack. An examination of the locality showed several apple-trees of ten years of age thickly incrusted with the insect, and in most of the residence lots in the surrounding quarter of the town the condition was the same, the fruit-trees of all sorts showing the insect in greater or minor abundance. Here and there was noted a tree of the apple, pear, or peach so thoroughly attacked that it was dead or dying, while others showed the presence of the scale in smaller quantities, permitting the relief of the trees if prompt measures were taken for the destruction of the pest.

Besides the sorts of fruit-trees above named, inspection showed the following to be more or less infected: Plums of all sorts both native and cultivated, cherries of several horticultural groups, apricot, plumcot, grape, currant, rose bushes of several types, and among ornamental or shade trees, Osage orange, cottonwood (one case), and Russian mulberry. So far as ascertained the scale did not occur on box-elder, black locust, honey-locust, elm, althea, the honeysuckles, Virginia creeper or splashes, though plants of these sorts, among others, were growing among or near infested fruit-trees. On the whole, however, the infestation was as serious as might be feared anywhere, including within the limit of the area about a dozen blocks in Ward 2 of the city, with scattered cases outside of this general section. An attempt to locate the site of the original infection was without result, owing to the general and even distribution of the pest within the area indicated. It was also found that suspicion could not be placed with likelihood of proof upon any nursery, as the trees were largely purchased from agents, and the places where they were grown were not known originally, or were not on record.

For the information of those who have not seen this insect, it may be described as a small sap-sucking louse, active when first born, but soon becoming immovable on the bark, leaf, or fruit, and secreting at this stage a flattened protective scale over its body, losing at the same time its more obvious insect structure, and devoting its energies thereafter to feeding on the sap of the plant, and producing young in great numbers. In cases where the scale lice are in moderate numbers, they will occur in small colonies or groups, or scattered singly over the bark, presenting then no striking mark to the vision unless one is looking for them. When scattered in this manner on younger bark, the tissue is generally reddened around them, a feature which lends to their more ready recognition. The adult females are the largest scales, slightly irregular in their convexity, of a dull gray or lighter, with a distinct boss or center of a different color and appearance. Young scales, also abundant at the present season, are smaller, more distinctly circular, and of a darker color, often nearly black. All sizes occur together in the clusters, frequently so crowded that the true color of the bark is not visible for the scurfy covering consisting of the numerous insects.

In May the female gives birth to young, and these travel over the tree in search of unoccupied spaces, which they occupy and then begin the se-cre-

tion of the protecting scale as above. With several indeterminate broods each season, the new growth is covered as fast as made, and the tree is not able to outgrow its enemy. The injury is done by the abstraction of the sap from all parts of the tree by the hundred thousand beaks throughout the entire growing season.

Owing to the form and feeding habits of the scale lice, the effective agents in their destruction are practically limited to the various washes and sprays that act as contact poisons or corrosives. Among these are crude petroleum, coal-oil, resin washes, and combinations of lime, sulfur, and salt, among others. Several of these are open to the objection that while destructive to the insects they also endanger the tree. Others can not be relied upon to kill the insects in all stages, necessitating the frequent repetition of treatment. At the present date the leaf and flower buds being expanded, perhaps as satisfactory a treatment as any is the application of a spray of moderately strong kerosene emulsion, previously preparing the trees by pruning off all that can be spared of the branches, to reduce the surface to be operated on. The application of this spray should be several times repeated during the spring and summer. This will not be completely effective, but may serve as a temporary check. It should not need saying that every infested twig and all other parts should be carefully picked up and burned, to prevent the further spread of the pest.

A more satisfactory treatment is the application, in the dormant season of the tree, of a wash or spray of the lime, sulfur, and salt mixture, as employed with good effect in eastern orchards. With this material, treatment must be deferred until the tree is again dormant, as the buds are now expanded.

The presence of this serious pest in Kansas orchards, even in the single case noted, is a warning that our State should be no longer without the protection of an effective inspection and quarantine law controlling the sale and shipment of trees and other nursery stock liable to transport this dangerous insect, and providing for the inspection of orchards, generally, over the State.

E. A. POPENOE.

Manhattan, Kans., April 24, 1906.

This Cleveland Cream-Separator is attracting attention throughout the country.

First, because it is sold direct at factory prices, and on a real free trial. No money in advance, no note to sign.

Second, it is the all ball bearing separator.

Third, it is the first separator that uses aluminum in its skimming device.

No matter how many cows you have, nor what your arrangements for marketing your milk or butter-fat, you ought to write at once for the catalogue of this machine.

You can get the catalogue by addressing the Cleveland Cream-Separator Co., at Cleveland, Ohio.

A Good Book Free.

At the time of the good roads meetings on the Santa Fe Railroad the company had printed a large number of pamphlets upon the use of the King split-log drag. This pamphlet was written by Henry Wallace, of Des Moines, Iowa, and was reproduced by the Santa Fe for special distribution in their good-roads campaign. There still remains on hand a number of these useful little books, and they are free for the asking. Drop a postal to Wesley Merritt, Industrial Commissioner, Santa Fe System, Railway Exchange, Chicago, Ill., and you will get one. They are free as long as they last.

Amatite—A Heavy-Weight Roofing.

The resisting ability of a roofing depends largely upon the amount of material there is in it—not upon the thickness nor upon the number of layers, but upon the actual density of the roof—that is upon its weight. A lightweight ready-roofing may be as thick as Amatite, but if it is not as heavy, roll for roll, it can't have as much good stuff in it. Amatite weighs as much as roofings that cost three times its price.

Free sample and booklet on application to the nearest office of the Barrett Manufacturing Company, New York, Chicago, Cleveland, Allegheny, Kansas City, St. Louis, Minneapolis, Philadelphia, New Orleans, Cincinnati, Boston.

A magnificent steel engraving of Hagerman Pass, the most famous mountain pass in Colorado, has been issued by the Coolroad Midland Railway. This engraving is 26 by 40 inches and suitable for framing. It will be sent to any address on receipt of 15 cents in stamp by Morrell Law, traveling passenger agent, 566 Sheldon Bidg., Kansas City, Mo., or C. H. Spears, G. A., Denver Col.

**Simpson - Eddystone Shepherd Plaids**

Nothing more appropriate and becoming for Spring and Summer dresses. Surely no more durable, economical and attractive material at the price.

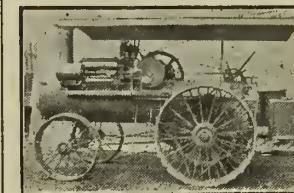
Ask your dealer for
Simpson-Eddystone Shepherd Plaids.
Three generations of Simpsons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia

**YARD FENCE HANDSOME, STRONG AND DURABLE.**

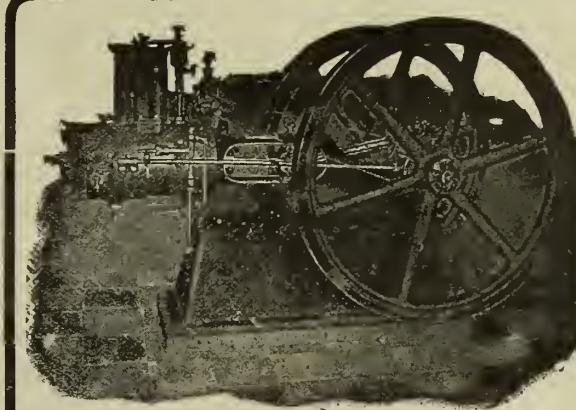
longer. Sold direct to consumers on thirty days trial. Write for catalogue.

The Farmers' Fence Co.
MELVERN, KANSAS
Box 36.

**The Lowell Manufacturing Co.**

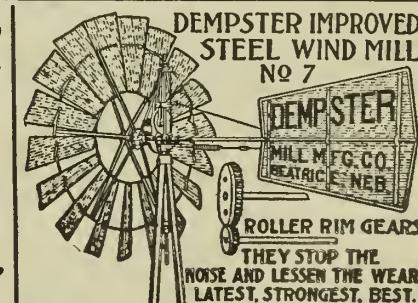
SALINA, KANSAS

Leather and rubber belting and thrasher supplies of every description. We have for sale at a bargain ten second-hand thrashing outfits, many of them as good as new. Long distance phone 432. Mention Kansas Farmer when you write.

**Dempster Mill Mfg. Co.**

Manufacturers of

Gasoline Engines
Wind Mills
Pumps and Cylinders
Steel and Wood Tanks
Well Machinery
Grain Drills
Cultivators

**DEMPSSTER IMPROVED STEEL WIND MILL NO 7**

ROLLER RIM GEARS
THEY STOP THE NOISE AND LESSEN THE WEAR.
LATEST, STRONGEST, BEST.
FACTORY, BEATRICE, NEB.

Great American Desert Seeds
are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.
M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet, Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

We Are Growers of Pure-Bred, Medal-Winning Fire-Dried Seed Corn.

Twenty-five varieties. Will send you one of our new 1906 catalogues and four varieties, two white and two yellow, of what we consider the best for your section, or will send samples of any variety you may desire. MANY FARMERS ARE DOUBLING THEIR YIELD WITH OUR SEED. Our catalogue of farm, field and garden seeds will tell you why this is, and how you can do the same. Sent free on application.

J. B. ARMSTRONG & SON, Shenandoah, Ia.

\$3,150,000.00 at Risks

30,000 Members

The Farmer's Alliance Insurance Company of McPherson, Kansas

We furnish insurance at cost; 12 years of successful business. Why carry your insurance with others when you can get it in this company at much less cost? Write for full particulars of our plan.

C. F. Mingebach, Sec., McPherson, Kansas

Dairy Interests

Grading Cream.

OSCAR HRF, PROFESSOR OF DAIRY HUSBANDRY,
KANSAS STATE AGRICULTURAL COLLEGE.

(Continued from last week.)

RANGE OF PRICE.

As a rule extras sell from one to four cents higher than firsts, depending somewhat on the supply, but the supply is never equal to the demand. Firsts sell from two to three cents higher than seconds, and seconds sell proportionately higher than thirds, but the demand is seldom equal to the supply. Since there is such a range in the market price of butter of the first and second grades, there should be a similar range between the first and second grades of cream, for it requires as great an effort to produce first-grade cream as to produce first-grade butter.

According to the score card, the flavor of butter is valued highest, and since the flavor of the butter depends on the quality of cream received, there should be a difference of at least four cents, and more legitimately a difference of five cents, between the first and second grades of cream. Likewise there should be a difference of not less than two cents, and more legitimately three, between the second and third grades.

Good flavor can only be produced by the proper fermentation, which requires a pure cream, hence the precautions that are necessary in handling cream to secure a good-flavored butter must begin from the time the milk is drawn. Any taint incorporated in the cream will follow the butter through all its stages of manufacture and onto the market, where it is discovered and a correspondingly lower price is paid for it. From this we see that the care of the cream while in the producer's hands will have a marked influence on the ultimate value of the butter.

The body of the butter can be governed largely by temperature, hence it is chiefly within the butter-maker's power to regulate this one point, which is also true of the color, salt, and package. The producer is held responsible for one point only, namely, flavor.

With this in view the development of the dairy business in Kansas depends on the care the farmer will give to his milk and cream and the care the creameryman will give to his butter in order to produce a product of the finest quality and one that will command the highest price. Cream or milk which tends to lower the grade of butter will lower the price of butter, and hence will make the dairy business less profitable.

THE GRADING OF CREAM.

With the above conditions before us it would be a legitimate plan for creamery companies to grade the cream they receive on a similar basis, and instead of paying a uniform price for butter-fat regardless of the quality of the cream, it should be graded and the cream having the best quality should receive the highest price. In this way a man, exercising great precaution in producing pure cream by building better barns, better milking stables, by getting better cows and feeding them better and keeping them healthier, by exercising great care in milking, by running the milk through a scrupulously clean separator and by cooling the cream and delivering it often in good sanitary cans, will receive a reward for his efforts and his expense, and will be encouraged to do even better. Nearly all other farm products, such as wheat, corn, live stock, butter, and cheese are graded and sold on their merits, so it is only fair to the man that sells cream that he should have a similar condition presented to him.

GRADES OF CREAM.

Cream should be graded as follows:

First grade, second grade, and third grade.

First-grade cream should be pure and sweet, containing not less than .2 of one per cent of acid, should have no undesirable flavors or odors, should be fresh (not older than three days), should contain not less than 30 per cent of butter-fat.

Second-grade cream may be slightly sour, containing not more than .3 of one per cent of acid, not older than five days, should contain no taints, and should have not less than 30 per cent of fat.

Third-grade cream may be somewhat stale, somewhat tainted, and may contain less than 30 per cent of butter-fat.

When cream is pure and sweet, containing less than .2 per cent of acid, it indicates that the cream has been produced under sanitary conditions and must have been kept cool. Since the lactic acid is developed from the milk-sugar, and since the bacteria do not grow in a cold temperature, it further indicates that there are small numbers of bacteria in the milk.

Cream produced under clean conditions does not sour rapidly, owing to the fact that there is a less number of bacteria in the cream. To detect the above amount of acid a test is used which is known as the alkaline test.

DESCRIPTION OF THE ALKALINE TEST.
The equipment for the alkaline test consists of an alkaline solution, an indicator, and a graduated cylinder or burette, a 50 cubic centimeter pipette with which to measure out the cream, and a cup. The principle consists of the fact that the alkali neutralizes the acid of the cream. Any alkali can be used in making this standard solution, for instance, lime, lye, soda, etc. However, for testing purposes these must be chemically pure, hence if lime is used the solution is added to sour milk and the acid unites with the lime, forming a substance which is neutral, neither alkaline nor acid. The alkalinity of the solution must be known, and hence it is termed a standard solution. If a certain alkali neutralizes a certain acid and this is a constant factor, and the strength of the alkaline solution is known and the point at which both neutralize each other can be determined, the amount of acid in the milk can be calculated. The way to determine the neutralizing point is by means of an indicator which turns pink if the solution is alkaline and turns white or colorless when the solution is acid. This indicator is commonly known as phenolphthalein. The alkali can be bought in bottles from any chemical laboratory and can be shipped to the farmers at a nominal cost and is made by dissolving four grams of sodium hydroxide, to which enough distilled water has been added to make one liter of solution. This makes what is commonly known as a 10th normal solution.

With the apparatus and solution at hand, measure 50 cubic centimeters of cream with a pipette into a beaker or cup, then with the same pipette add 50 cubic centimeters of pure distilled water, then add 5 drops or more of indicator. Fill the burette to the zero mark with alkaline solution, but before doing this be sure and see that the burette is absolutely free from water and acid. Probably the best way is to rinse the burette with a little of the solution. Now add the solution to the cream in a slow manner until you notice that the pink solution appears very reluctant in destroying the pinkish color on stirring. Then this neutralizing solution should be added drop by drop only. The moment the cream remains pink the acid has been neutralized. The number of cubic centimeters added to the cream is read on the burette, and from this the percentage of acid can be calculated in the following manner:

Number of cubic centimeters of alkali multiplied by .009, divided by the number of cubic centimeters of cream, times 100.

Example: If it requires 32 cubic centimeters of alkali to neutralize 50 cubic

WHY YOU SHOULD BUY A DE LAVAL CREAM SEPARATOR

BECAUSE—It will save you at least \$10 to \$15 per cow every year of use over any gravity setting or skimming process, and last you at least twenty years.

BECAUSE—It will save you at least \$5 per cow every year of use over any imitating cream separator, and last you from five to ten times as long.

BECAUSE—In proportion to actual capacity and durability it is not only the best but also the cheapest of cream separators, and saves its cost the first year of use.

BECAUSE—It can be bought either for cash or on such liberal terms that it actually pays for itself.

BECAUSE—Being the first of separators it has always kept far in the lead, being protected by one important patent after another, and its sales are ten times those of all other machines combined.

A new DE LAVAL catalogue explaining these facts and many others in detail is to be had for the asking.

The De Laval Separator Co.

RANDOLPH & CANAL STS.,
CHICAGO.

1213 FILBERT STREET,
PHILADELPHIA. 74 CORTLANDT STREET

9 & 11 DRUMM STREET,
SAN FRANCISCO.

General Offices:

109-113 YOUNVILLE SQUARE,
MONTREAL.

75 & 77 YORK STREET,
TORONTO.

14 & 16 PRINCESS STREET
WINNIPEG.

ic centimeters of cream, what per cent of acid is there in the cream?

The formula would be:

$$\frac{32 \times .009}{50} \times 100 = .576, \text{ the per cent of acid in the cream.}$$

CREAM SHOULD NOT HAVE UNDESIRABLE FLAVORS OR ODORS.

The causes that produce undesirable flavors and odors in cream are as follows:

1. Cream produced from abnormal milk which has been drawn from diseased cows.

2. By feeding the cow moldy or partially decayed feeds.

3. By keeping the animal in uncomfortable conditions, which causes her to become feverish or excited.

4. By milking a cow in a filthy stable, or near decomposing material.

5. By allowing cows to wade around in mud puddles or cesspools and then milking the cow without washing the udder.

6. By milking the cow with dirty hands, or by milking on the hand in order to wet the teat. Under all conditions milk the cow with a dry teat. If the teat is chafed or sore use vaseline instead of milk to moisten it.

7. By milking into filthy pails or pails that have not been scalded with hot water. In washing the milking utensils it is advisable to use hot water and some washing powder, and finally rinse with boiling water or steam over a steam jet.

8. By running the milk through an unclean separator. (See bulletin No. 131, Kansas Experiment Station.) The separator should be taken apart and washed ever day. If the separator is used twice a day it is preferable to take it apart and wash it both times, but if time does not permit this, at least five gallons of warm water with some washing powder should be run through it, followed by a gallon of

boiling water without the washing powder.

9. By running cream into a filthy can. Care should be taken that cream should be put into a clean milk-can that has previously been scalded and cooled.

10. By not cooling the cream to a proper temperature. After cream has been separated it should be cooled to at least 60° F., and lower if possible. When putting cream from two milkings together care should be taken that the cream added last is thoroughly cooled.

11. By not properly covering the cream-can with some cloth in the summer when driving long distances to the station.

12. By letting cream set around at stations for a long period of time.

DELIVERY.

Cream should be fresh and should be delivered at least twice a week in winter and three times a week in summer. Cream kept for longer periods of time, unless kept on ice, will produce a rancid flavor when churned into butter. Hence, a man delivering cream must deliver as often as this or his cream will not be first grade.

PER CENT OF FAT.

First-grade cream should contain not less than 30 per cent of butter-fat, for the reason that cream with this per cent of butter-fat will keep better and costs less to transport than cream of a lower per cent of fat, and the dairyman will recover more skim-milk.

Some causes that tend to lower the per cent of butter-fat below 30 per cent in cream separated with a cream-separator are as follows:

The variation in the per cent of butter-fat of hand-separated cream is very great if operators are not careful in operating their machine uniformly. There are several factors that influence the test of cream from separators. The first and probably the most important cause that reduces the per cent of but-

Sharples
TUBULAR
CREAM SEPARATORS

bowl without complicated inside parts—hold the world's record for clean skimming, durability, capacity, easy turning and easy washing—save half the work—greatly increase the amount and quality of butter—are wholly unlike all other separators. Write for catalog R-165

THE SHARPLES SEPARATOR CO.,
West Chester, Pa.

We want you to know Tubular Cream Separators as they are. Investigate the low can and enclosed gears. Tubulars have neither oil cups, tubes, nor holes—they oil themselves. They have

Toronto, Can.

Chicago, Ill.

ter-fat in cream is by turning too slowly, not giving the bowl enough speed. Anything that tends to change the speed of the bowl from one separation to another influences the per cent of butter-fat in the cream. A uniform speed of the bowl is obtained by turning the crank at a given speed at all times and giving the crank an equal pressure at all points in its circuit around the axis. The speed at which the machine should be run is indicated by the manufacturer. Follow these instructions and count the revolutions each time the machine is used, to be sure that the speed is maintained.

If milk is warm the cream will be thicker, if cold it will be thinner, other conditions being equal. Milk immediately after it is drawn from the cow has the proper temperature at which to separate.

Milk should be run through a separator at a constant rate. If milk is fed into the separator at an uneven rate, if at times the flow of milk is stopped, the thickness of the cream will be greatly influenced. The faster milk is run through a separator, the thinner will be the cream, other conditions being equal.

The amount of water or skim-milk used to flush out the bowl will naturally tend to decrease the per cent of butter-fat by diluting the cream with water or milk.

There is a cream screw or skim-milk screw in each separator for the purpose of changing the thickness of cream when desired. By this it can be so regulated as to skim thin or thick cream, and when once set, if all other conditions of the separator are uniform, it will produce nearly a constant per cent of butter-fat.

These principles hold true in all cream-separators and explain why the per cent of butter-fat sometimes runs below 30 per cent.

While all the points mentioned herein can be known without depending upon the judgment of any particular individual, as for instance, determining the amount of acid in the cream, the frequency of hauling the cream, per cent of butter-fat in the cream, etc., there remains, however, one point still unsolved which is directly dependent on expert judgment, namely, the flavor of the cream.

A cream may be acid and have a pleasant flavor and odor, and on the contrary a cream may be sweet and have a bad flavor. As yet no test has been found that will determine the flavor absolutely except the taste and smell of man. Hence, while it is a simple and practical problem for all creameries to adopt the schemes as suggested above, in due justice to the producer as well as the creameryman, there should be in as many places as the business would permit, men who are competent and efficient in judging flavor and odor of cream. Such a man in order to give universal satisfaction must have some experience in the judging of cream. He must furthermore have some knowledge of the physical and chemical properties of milk and cream. In short, he should be a man well versed along dairy lines in order to impart information to those who need it, and at the same time stimulate and keep up the progress in dairying.

While this method would be only practicable in localities where dairying is carried on quite extensively, there is, however, a second manner of handling cream, namely, to have each farmer send his cream directly to the creamery. This is a very satisfactory method to the creamerymen and also to the producer if the producer is lo-

cated on a direct shipping point to the creamery, but wherever transfers need to be made, the grading of this cream at the factory would be unjust to the producer since the railroad company is quite often responsible for delaying shipments at transferring station. To overcome this point it is quite necessary in order to raise the standard of butter to operate refrigerator-cars for the purpose of transporting cream long distances, and it is hoped that in the near future dairying will develop to such an extent as to make it profitable to use refrigerator-cars for transporting cream.

CONCLUSION.

The dairy department of the Kansas State Agricultural College inaugurated this scheme of grading cream nearly two years ago. It has given universal satisfaction to the patrons and has produced a marked improvement in the quality of the cream. On account of the practicability of this scheme, and its legitimacy both to the producer and consumer, we feel that every creamer- man and dairyman should indorse and help to promote the idea of grading cream upon its merits.

The Profitable Dairy Cow.

PROF. C. S. PLUMB, OHIO STATE UNIVERSITY.

(Continued from last week.)

CARE AND FEED OF THE DAIRY COW.

Seven years had passed by since young Winslow had returned to the farm. The herd had gone through a remarkable change. The process of selection, culling out, and breeding up the butter yield had increased from 180 to 400 pounds a year. The merits of the herd were becoming known the whole country round and the farmers of the neighborhood really began to take a just pride in the Rockdale herd. In fact, the herd was known far more than locally. Enterprising agricultural journalists had discovered its existence and had advertised it over a wide territory.

One day the neighbor who had purchased the first bull John had placed at the head of the herd, made a call and engaged in conversation. He was a fairly good man, but like many other persons owning stock, gave his herd less careful attention than good business warranted. He not only knew the Winslows laid great emphasis on the importance of correct breeding, but he was well aware that the Rockdale herd was carefully fed and attended to. He recognized the fact that his own cattle looked thinner in flesh, more ill-kept, dirtier, and more starved than that of his now prosperous neighbor.

After passing the customary comments on the weather and crops, John remarked: "Mr. Lee, that bull you purchased of us sired a likely lot of calves for you, didn't he?" "Yes," said Mr. Lee, "he certainly did. The heifers now in milk are better than anything we have ever owned before. Still, it seems to me that our herd is not doing as well as it should, and our cattle are not in the condition that yours are. I have been wondering how much feed and care had to do with this difference. Our barn is fairly warm and comfortable, and yet our cattle do not look thriving." "How about your feeding and growing?" inquired John. "I feed plenty of hay and straw," was the reply, "but I never have felt that we could afford to feed much grain. The cost is too great. We don't use much provender, I know."

"It is sort of curious," remarked the junior member of the Winslow firm, "but I have just been studying over a pamphlet which I received from the Cornell University Experiment Station. You know that there are in the different States agricultural experiment stations that are working in the interest of the farmer, studying problems in soils, fertilizers, feeding stock, etc. Each of these stations publishes several times a year bulletins as they are called, which tell about their experiments. These are free to those who desire them. The professors at the agricultural college used to make students study over some of the more important bulletins, and since I graduated I have been getting bulletins from some of the States whose publications I thought would help me. Now, in this bulletin Professor Wing and Mr. Ford tell of 'An attempt to increase the fat in milk by means of liberal feeding,' which is somewhat in the line our conversation has fallen into. They planned an experiment to find out whether a herd of dairy cows previously kept under adverse conditions could be made more profitable by better feeding and care. So they went out into the country near the station and found a herd of 21 cows with a reputation of being poorly fed

GET IT ALL. GET THE LAST DROP. BUY DIRECT FROM THE FACTORY AT FACTORY PRICES AND SAVE

20% to 50%

It's to your interest to know about the liberal selling plan of the

Davis
Cream Separator

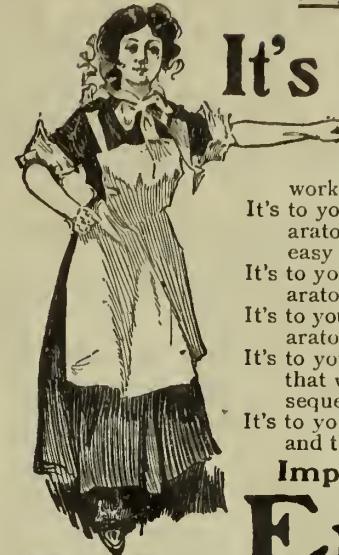
No other skimming device known so surely gives you all the cream, and none does it with so little work. It is absolutely the simplest and easiest running separator. Only 3 pieces in its bowl. Think of the ease of keeping such a bowl clean. It never can get out of balance. The tank is only belt high, no high lift. You should know all about the Davis. Investigate before you buy. Write to day for money saving catalog No. 126.

DAVIS CREAM SEPARATOR CO.,
540 North Clinton St., Chicago, Illinois.



Dairy Talks by the EMPIRE Dairy Maid.

It's to Your Interest



It's to *your* interest to get a cream separator that won't make you more work than it saves.

It's to your interest to get a cream separator that is both easy to turn and easy to clean.

It's to your interest to get a cream separator that does not break down.

It's to your interest to get a cream separator that does not wear out.

It's to your interest to get a separator that will get *all* the cream. Consequently,

It's to your interest first to investigate and then to get an

Improved Frictionless



Empire

Easy Running Cream Separator.

Here is the reason in one word: *Simplicity*.

As one of our customers says:

"It's simply perfect because it's so perfectly simple."

Its small light bowl with few parts, requires little machinery for turning it, and little labor on your part.

Its smooth service and few interior parts make it easy to clean.

Its five compartments make it a close skimmer. The milk is given five separate separations. None of the cream can get away.

Its superior construction—the extra materi-

als and workmanship in it make it extremely durable.

Its few parts make it need few repairs.

Its years of reputation and its standing make you perfectly safe in buying it.

It will make more dollars for you than any other separator. No question about it.

It's to your interest to investigate.

Won't you, then, send your name and get some of the Empire books? They are good reading.

Please tell how many cows you keep and what you do with the milk. Address

EMPIRE CREAM SEPARATOR COMPANY, BLOOMFIELD, N. J.

311 TEMPLE BLOCK, KANSAS CITY, MO.

For postage. Send eight two-cent stamps and tell how many cows you keep and what you do with your milk and we will send you the "Game of EMPIRE Success"—the most amusing, attractive and fascinating game ever invented. Old and young can play. Bushels of fun for all the family. Handsomely lithographed in colors; mounted on heavy binders' board 12x16 inches.

Ask for the one you want—

1. Full catalog and price list.
2. "The EMPIRE Dairy Maid."
3. "The Switching of Hiram, (story.)"
4. "Figger it out for Yourself."
5. "A Gold Mine for Butter Makers."
6. "Dairy Results—Dollars."
7. "Money and the Way to Make It."

A Reward

FOR THE

Man Who Milks

The man who ships his cream direct is rewarded for quality. He stands alone. He doesn't have to bear the burdens and suffer for the mistakes and carelessness of his neighbors. If your cream is clean and not too sour and good flavor, you get the highest grade and the best price. If your facilities for handling your cream are better than your neighbor's and you can keep it longer you need not ship so often. Consequently you economize on time.—"Time is money."

Everything favors the individual shipper.

Our system takes care of him. Our factory is his natural home.

Send us your cream and we'll send you the money.

Respectfully,

BLUE VALLEY CREAMERY CO.,

ST. JOSEPH, MISSOURI.

Peerless Cream Separators

Reasons Why the PEERLESS is the Best

1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.

3rd—Enclosed frame. Free from dust injury resulting from machine impossible.

4th—Perfectly noiseless.

5th—Heavy enough and strong enough to lift a box car, which insures durability.

6th—The bushings made of phosphor bronze the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{16}$ of an inch.

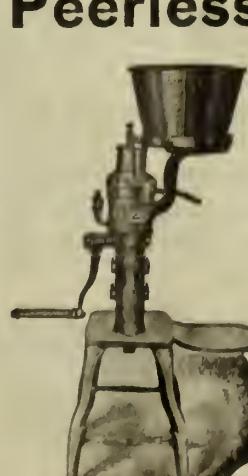
7th—Every journal bushed with brass or phosphor bronze.

This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.

8th—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter fat and generally less than 1-100 of 1 per cent butter fat.

PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write



BRADLEY, ALDERSON & CO.,
Tenth and Hickory,
KANSAS CITY, MO.

THE KANSAS FARMER

Doctor Brigham Says

MANY PHYSICIANS PRESCRIBE

Lydia E. Pinkham's
Vegetable Compound

The wonderful power of Lydia E. Pinkham's Vegetable Compound over the diseases of womankind is not because it is a stimulant, not because it is a palliative, but simply because it is the most wonderful tonic and reconstructive ever discovered to act directly upon the generative organs, positively curing disease and restoring health and vigor.

Marvelous cures are reported from all parts of the country by women who have been cured, trained nurses who have witnessed cures and physicians who have recognized the virtue of Lydia E. Pinkham's Vegetable Compound, and are fair enough to give credit where it is due.

If physicians dared to be frank and open, hundreds of them would acknowledge that they constantly prescribe Lydia E. Pinkham's Vegetable Compound in severe cases of female ills, as they know by experience it can be relied upon to effect a cure. The following letter proves it.

Dr. S. C. Brigham, of 4 Brigham Park, Fitchburg, Mass., writes:

"It gives me great pleasure to say that I have found Lydia E. Pinkham's Vegetable Compound very efficacious, and often prescribe it in my practice for female difficulties.

"My oldest daughter found it very beneficial for a female trouble some time ago, and my youngest daughter is now taking it for a female weakness, and is surely gaining in health and strength.

"I freely advocate it as a most reliable specific in all diseases to which women are subject, and give it honest endorsement."

Women who are troubled with painful or irregular periods, bloating (or flatulence), weakness of organs, displacements, inflammation or ulceration, can be restored to perfect health and strength by taking Lydia E. Pinkham's Vegetable Compound. If advice is needed write to Mrs. Pinkham, at Lynn, Mass. She is daughter-in-law of Lydia E. Pinkham and for twenty-five years has been advising sick women free of charge. No other living person has had the benefit of a wider experience in treating female ills. She has guided thousands to health. Every suffering woman should ask for and follow her advice if she wants to be strong and well.

Neuralgia
And Other
Pain.

All pain in any disease is nerve pain, the result of a turbulent condition of the nerves.

The stabbing, lacerating, darting, burning, agonizing pain that comes from the prominent nerve branches, or sensory nerves, is neuralgia, and is the "big brother" of all the other pains.

Dr. Miles' Anti-Pain Pills rarely ever fail to relieve these pains by soothing these larger nerves, and restoring their tranquility.

Dr. Miles' Anti-Pain Pills leave no bad after-effects, and are a reliable remedy for every kind of pain, such as headache, backache, stomachache, sciatica, rheumatism and neuralgia.

They also relieve Dizziness, Sleeplessness, Nervousness, Car-Sickness, and Distress after eating.

"For many years I have been a constant sufferer from neuralgia and headache, and have never been able to obtain any relief from various headache powders and capsules, until I tried Dr. Miles' Anti-Pain Pills. They always cure my headache in five minutes time," FRED R. SWINGLEY, Cashier 1st Nat. Bank, Atkinson, Neb.

Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails he will return your money.

25 doses, 25 cents. Never sold in bulk.

Miles Medical Co., Elkhart, Ind.

that had been on the same farm for some time, that had a large proportion of comparatively young animals, most of which had calved as nearly as possible at the same time. In this herd only four of the cows were more than eight years old, all but one had calved within a period of two consecutive months, and all were real thin in flesh, much as yours are. Like yours, they represented native and mixed breeding. The experiment then begun by the station, ran somewhat like this. A record was kept of the production of the herd in milk and fat for one entire milking period on the farm of the owner, without in any way changing the conditions under which the animals had lived. The man who owned the cows, Mr. Gibson, fed and cared for them just as he had always. The station arranged for him to weigh the daily milk yield and take frequent samples of the milk of each cow, which were once a week tested for their butter-fat composition by a representative of the station. After the first milking period was over the cows were brought to the station and taken to its farm, where they were cared for and fed liberally for two years. A record was kept of all the food they ate, and the milk they produced was weighed daily, and its fat composition measured. While these cows were being studied the other cows left on the Gibson farm were also being studied just as they were the first year. On the fourth period of milking, the 10 cows they brought were taken back to the Gibson farm and again subjected to the same conditions they were under when the experiment began. During the second milking period at the station they fed the cows all the easily digested food they would consume without getting them out of condition, economy of production being not considered. During the third milking period they tried to feed all the coarse fodder each cow would readily eat, and all the grain that could be eaten in addition such as would give return at the pail. I might say here that this third method really represents our policy at Rockdale farm, to feed liberally yet economically. Those cows for coarse fodder were fed red clover, timothy hay, and slage. When the cows were on pasture they also got a grain ration, until the milk yield became very small.

"Now, what was the result of this careful experiment covering four years, bearing as it did on the health and vigor of the herd and its producing capacity? Well, I notice in the first place that the total yield of milk and butter-fat was in nearly every case much increased while the cows were at the experiment station under satisfactory care. Of the 10 cows it is shown that by liberal feeding the yield was increased 46 per cent in milk and 55 per cent in fat. These 10 cows were not the best in the herd of 21. They simply represented a fair average of the herd. Here is a fair sample of the way those cows did, taking Polly for example: The first year she produced 3,143 pounds of milk and 177 pounds of fat; the second year she produced 5,526 pounds of milk and 346 pounds of fat; the third year she produced 4,802 pounds of milk and 283 pounds of fat; the fourth year she produced 2,945 pounds of milk and 184 pounds of fat.

"Some of the other cows show an even greater influence from feed and care than this.

"In regard to the cost of the milk and fat during these different feeding periods, it is interesting to note that the average cost of 100 pounds of milk the first period on the Gibson farm was 53 cents, the fat being 12 cents a pound; the second period, when economy was not considered, it was only 65 cents an 100 pounds for the milk and 14 cents a pound for the fat; while the third period of good feeding the cost was reduced to 45 cents an 100 pounds for the milk and 10 cents a pound for the butter-fat. Another interesting thing in this bulletin that I see is the change in the appearance of the cows due to generous feeding and care.

"It seems to me that this bulletin teaches an important lesson to us dairy-cattle men, for it proves by a four years' actual trial that liberal feeding not only pays in increased production, but it also pays by a more vigorous development of the herd. If the herd is more vigorous, then this vigor is transmitted to the offspring. In my opinion, too many dairy-cattle men fail to see the relationship of ample feed to proper nutrition and continuous herd vitality."

The average man is fair minded, and is willing to be influenced by a rational presentation of facts. The contents of this bulletin as presented by John

to Mr. Lee, made a deep impression on his mind. Said he: "John, that is a good piece of work those agricultural experimenters have done, and I believe enough in the results which they have secured to profit by it myself through better care and more generous feeding of my own herd. I am mighty glad that I happened to drop in on you this rainy day."

There are many things which go to make up success in any one's business and life, but some of them are of more importance than others. John Winslow was a fair representative of many a bright New England lad of parts who are ambitious to be useful and earn a living on a better standard than the commonplace employee. He was fortunate in a father who was willing to aid and assist him in a useful education, and who was willing to put his education to the test.

RESULTS OF GOOD BREEDING.

John Winslow is a young man yet. The herd, which is yet one of partnership, has increased in its productive capacity from 180 to 400 pounds of butter a year. While the cows with heavier yields eat somewhat more food, the degree of profit is far greater in excess of cost of production. In discussing the situation, the subject of this narrative said: "It is not a difficult thing to develop a profitable herd. It goes almost without saying that the average cow is a consumer rather than a producer. My own experience, covering but a comparatively few years and several generations of cow life, demonstrates to my entire satisfaction that the foundation of successful herd-development rests primarily on breeding the proper type. A large degree of my success has been due to breeding consistently and persistently to that purpose. A suitable bull in type and breeding will yield results of no uncertain character if mated to cows approaching the deep-bodied, full-uddered dairy type. I recently read an article by Hark Comstock on improving the dairy cow, in which he expressed some truths that have had much application in the improvement of the Rockdale herd. He says: 'According to the statistics of the Department of Agriculture the average dairy cow of the country gives 130 pounds of butter a year. In the dairy demonstration now in progress on the World's Fair grounds at St. Louis the entire Jersey team of 25 cows has averaged more than that in 60 days. Admitting that better care and better food have to do with the question, there yet remains a very wide margin that can only be credited to the functional capacity of the cows bred in the bone. When farmers began to select their bulls from pure-bred herds possessing these great dairy values, letting the beef question and all side issues take care of themselves, they began to establish improved machinery in the shape of dairy cows. Nearly 12,000,000 cows are devoted to buttermaking in the United States, and the product in round numbers is 1,500,000,000 pounds of butter, worth, at 18 cents a pound, \$270,000,000. Suppose that each of these cows could produce a heifer calf by a high-class Jersey bull, and the improvement in butter capacity for the new generation were even as little as 5 per cent, which would be an exceedingly small estimate, the increased butter output for a single year, assuming that the price was not lowered, would be worth \$13,500,000, a net profit over present income due solely to the use of improved cow-machinery.' This improved cow-machinery referred to by Hark Comstock is due to the patient and intelligent efforts of a comparatively few breeders, who have developed individuals and families of great productive capacity, whereby the mass of breeders may improve their herds. It is due to the work of such men that the improvement of Rockdale herd has been possible in so short a time. To them American stockmen owe a deep debt of gratitude. If our herds are not productive and profitable, it is due to neglecting the opportunities provided through the agricultural college, experiment station, dairy and live stock literature, and the help of intelligent breeders. These all point the way toward success."

In drawing this narrative to a close, it is unnecessary to concern ourselves regarding the identity of the subject of the sketch. He still lives on Rockdale Farm in fair New England, where he continues to work among the herd he loves so well, for his is a labor of love, not of suffering. He has been an unconscious instrument on his part in uplifting the agricultural dignity of his community and State, while he stands as a strong example of what a

POULTRY BREEDERS' DIRECTORY.

FOR SALE—Choice Light Brahma eggs, \$1 for 15; \$1.75 for 30. Wm. Plummer, Barclay, Kans.

ROSE COMB BROWN LEGHORN EGGS, 15 for \$1.50 for \$2.50, 100 for \$4. Mrs. John Holzhey, Ben-dena, Kans.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED ROCKS and Silver Penneled Wyandottes. Having hatched all the chicks I wish, will sell eggs from my high scoring pens at \$1.25 per 15; fertile eggs at 5 cents each. Mrs. Chas. Osborn, Eureka, Kans.

SILVER WYANDOTTES EXCLUSIVELY—Eggs from State Show winners, 15 for \$2. Farm range Silvers, 100 eggs, \$4. Mrs. J. W. Gause, Emporia, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1 each. Eggs, sitting \$1.50, for incubators, \$5 for 100. Address Ben Warren, Maple Hill, Kans.

FOR SALE—Silver Laced Wyandotte eggs; farm raised, \$1 per 15; \$4 per 100. Cumberland Raspberry Farms, \$6 per 1000. Frank Rice, Wathena, Kans.

S. C. B. LEGHORN EGGS FOR SALE. From first cockerels at the State show. \$2.50 per 15. Other pens \$1 per 15. Mrs. Siler Seal, Meriden, Kans.

R. C. B. LEGHORN EGGS FOR SALE. Stock from best laying strains \$1 for 15; \$5 for 100, best selected and fresh eggs. Mrs. Bertha Evans, Route 4, Box 32, Lyons, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

WHITE PLYMOUTH ROCKS EXCLUSIVELY—Eggs, \$2 per 15; \$3 per 30. All orders given prompt attention. R. C. Capron, Route 7, Winfield, Kans.

BARRED PLYMOUTH ROCK EGGS—from free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas. Prize-winners in every pen. Eggs, \$1 per 15. Vira Bailey, Kinsley, Kans.

BLUE BIRDS—Barred to the skin. Hawkins Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Shibley, Lawrence, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 98%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kans.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller-man, "Vineyard Farm," Mound City, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15; \$5 per 45. R. W. Harmston, R. R. 6, Newton, Kans.

BLACK LANGSHAN EGGS—from main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fishel's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

MAMMOTH BRONZE TURKEYS for sale. In-quire of Mrs. T. M. Fleming, Fontana, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

EGGS, EGGS—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred, Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

EGGS FROM MAMMOTH BARRED PLYMOUTH ROCK CHICKENS \$1.50 per 15. A. D. Wyncoop, Bendena, Kans.

BLACK LANGSHAN—Hens scoring 93 and upward—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BARRED PLYMOUTH ROCKS—Large pure-bred, good laying strain; have free range; eggs, fresh, select, packed carefully, \$1 per 30; \$1.50 per 45; orders filled promptly. Emma Bauer, Beatrice, Kans.

FOR SALE—Barred Plymouth Rocks, exclusively. Fresh eggs from mature stock, carefully packed, \$1 per 15. Mrs. T. B. Shulsky, Denton, Kans.

MAMMOTH BRONZE TURKEY EGGS—\$3. for 9 from choice hens and 34 young tom. Also a few Fox Terrier puppies. Safe delivery of eggs guaranteed. Mrs. A. E. Harness, Route No. 1, Speed, Mo.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Colle pups. W. B. Williams, Stella, Neb.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Digton, Kansas.

GEN POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 or \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$3.

THE KANSAS FARMER

POULTRY BREEDERS' DIRECTORY.

S. C. B. LEGHORN SPECIALIST—Breeder 22 years. Utility and exhibition stock or eggs—\$1 per 15; \$4 per 100. Chicks free. Oilt-edge Poland-Chimes. A. B. Hoffman, Reece, Kans.

FOR SALE—Golden Wyandotte eggs, from the best pen; \$1.50 per 15. E. Davis, 910 Madison, St., Topeka, Kans.

FOR SALE—After May 1, best Barred Rock eggs in State for \$1 for 15; \$5 for 100. A. C. Ralt, Junction City, Kans.

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Meriden, Kansas.

S. C. B. LEGHORN EGGS—Extra fine. Cockrels from prize-winners; good markings; \$1 per 17; \$5 per 100. Mrs. D. M. Evans, Edgerton, Kans.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. Turkeys, \$1.50 per 9. Embden geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93% to 95%. \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

WHITE WYANDOTTE COCKERELS. (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kansas.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Duskin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore Eureka, Kans.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

SILVER LACED AND WHITE WYANDOTTES \$1 per sitting of 15. Eggs guaranteed. Circular free. R. C. Macaulay, Route 1, Frederick, Kans.

Pure Single Comb Brown Leghorn Eggs—30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

Cornish Indian Game Eggs. Write L. C. Horst, Newton, Kansas.

Buff Leghorns S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Kans.

Eggs for Hatching M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Green, Emporia, Kansas.

Johnnie Chase, Glasco, Kas.

Breeds Black Minorcas, S. C. Brown Leghorns and Barred Rocks. Second to none in the state. Eggs, \$2 per sitting.

W. P. ROCKS EXCLUSIVELY. Eggs for hatching 15 for 75 cents; 50 for \$2.

MRS. ALICE PERKINS, Munden, Kansas.

BUFF ROCK EGGS Here are, Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

Kansas Chick Feed For baby chicks, a balanced ration which makes the little fellows healthy, hearty and happy. Price, 25 pounds for \$1. Our Kansas Lice Killer is guaranteed to kill the lice; 5 packages for \$2, prepaid. W. E. Smith, Osborne, Kansas.

Imported S. C. Black Minoras The world's greatest laying strain. Eggs \$1.50 per 15; \$6 per 100. Send 5 cents for circular. Address George Kern, 817 Osage St., Leavenworth, Kans.

SILVER WYANDOTTES exclusively Blue ribbon winners at the State Fair and State Poultry Show. Eggs \$2 per 15; \$5 per 45, expressage prepaid. A few good cockerels for sale. W. H. Comstock, Station II, Topeka, Kans.

Eggs For Hatching WHITE HOLLAND TURKEYS, MAMMOTH, PEKIN DUCKS AND BARRED PLYMOUTH ROCKS, \$1 per setting for any of the above, fresh eggs carefully packed and safe arrival guaranteed. A. F. Ilene, Manhattan, Kans.

White Plymouth Rocks Scoring 95 Scored by Rhodes

Eggs from selected pens, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Ida Moler, Route 2, Lincoln, Kans.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. HINIKER, Box 90, Mankato, Minn.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on

Chas. Foster & Son, Eldorado, Kan. Route 4

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 93%, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention KANSAS FARMER when writing.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hen, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLIAMS, Inman, Kans.

man may do to demonstrate the usefulness of the modern agricultural education. You may not know him personally, but as the years go by you may discover his counterpart here and there when perhaps feast expected. If, when in future, you chance upon a strong herd of dairy cows that appears to you much what Rockdale herd is at the completion of this narrative, if you will trace up its history, I am sure you will learn some valuable lessons, even if it does not prove the property of Winslow & Son.

The Poultry Yard

Conducted by Thomas Owen.

Poultry Notes.

The next problem to confront the poultryman is the extermination of mites and lice. It is much easier to prevent these parasites from getting a foothold in the poultry house than it is to get rid of them after they once take possession of the premises. A good preventive is to thoroughly whitewash the house, roosts, and nests with a strong solution of lime and water and crude carbolic acid. The liquid lice-killers are also good for this purpose but more expensive than the whitewash. This matter should be attended to at once before the mites get too solid a hold of the poultry houses, and they should be sprayed at least once a month during the warm weather.

As the weather gets warmer, shade should be provided for the chicks, otherwise they will not thrive. If you have no trees or bushes for shade, then some kind of a shed should be made so that the chicks may get out of the rays of the hot sun. Even the old hens will appreciate a shady place during the hot weather months.

When chicks have wing feathers that drag on the ground, it is a good plan to clip them. Many times it is lice that causes the chicks to drop their wings, and in these cases a little lice powder will be all that is necessary. Sometimes it is caused by indigestion through improper feeding. A partial correction of this trouble is in feeding no corn in any form for a week or ten days, less whole grain, more bread and milk, meat scraps, rolled oats and bran, slightly moistened with milk, and never feeding them as much as they want at any one time, but feed oftener and make them want for more all the time. Then pull the drooping flight feathers out of the wings. Mind you, the flight feathers only, not the secondaries, which are of great assistance in allowing the nourishment necessary to continue the growth of these already overgrown flight feathers, to go to the upbuilding of the impoverished system, and by the time these feathers begin to grow again the vitality of the chick will be much improved and the possibility of its becoming a worthless runt is very much lessened.

When grass is beginning to grow it will be an advantage to use a little salt in the ground feed, but only enough for a seasoning, as too much is detrimental, creating thirst and leading to inflammation. This inflammation is due to the drain of the fluids on the body, and the birds are unable to drink sufficient water to counteract the effects of an overdose of salt.

To have eggs of fine flavor the hens should be fed on clean food. Fowls fed on putrid meat, decayed or decaying animal or vegetable substances, will lay eggs that are not fit to eat. Proof of how the food affects the eggs may be had by feeding a number of hens on onions for a certain period. The eggs will become so strongly tainted with the onion flavor as to be unpalatable. Where the farmer allows his fowls unlimited range, it may be said that it is impossible to control their feed, but under no circumstances should the fowls be allowed access to filthy substances. Even the practice of allowing the hens to scratch in the dunghill, as some of the old school of farmers think is necessary for the production of eggs, is not to be recommended. Where the fowls are kept for the purpose of money-making, they will be found systematically arranged in certain numbers in pens and their actions under control. Good care, clean food, and clean quarters will be found hand in hand. System and intelligence in the management of poultry is as necessary as in any other line of business.

The noblest question in the world is, What good may I do in it? Benjamin Franklin.

POULTRY BREEDERS' DIRECTORY.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4.

T. F. Wenner, Blue Mound, Kansas.

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50.

E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns

EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ-ING, KAN.

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

MILLER'S FAMOUS BARRED ROCKS

Every pen headed by a prize winner. First prize cockerel Kansas state show Jan. 1905. First prize cockerel St. Joseph, Mo. Jan. 1906. Second and fifth cockerel Kansas state show 1906. Also won first pullet Kansas state show 1906. First grand pen Kansas state fair Sept. 1905. If you want to raise first class stock get a sitting or two of eggs from my pens and you will be pleased with the results. Good batches guaranteed. Send for descriptive circular. Price \$2 per 15 or 30 for \$3.50. Let me book your orders now. A. H. Miller, Bern, Kans.

INCUBATOR EGGS

From high grade White Rocks and White Wyandottes.

\$3.00 for 50, \$5.00 per 100

SEND FOR CIRCULAR.

W. L. BATES, Topeka, Kans.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR, Glendale Park, Hutchinson, Kans.

Kansas Safety Incubators

Our machine is built on scientific principles and does its work promptly, requiring less attention than any other machine. Send for our catalogue which gives full particulars of our incubators and brooders.

W. E. Smith, Osborne, Ks.

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co., Wichita, Kansas.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants.

A. H. DUFF, Larned, Kansas.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 98%.

and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address

THOMAS OWEN, Sta. B., Topeka, Kans.

BUFF LANGSHANS \$1.00 per 13 eggs.

White \$2, Black \$2, \$1 and \$5 per 100; Buff Leghorns, Orpingtons, Cochins, S. & D. C. H. and White Leghorns, H. and W. Rocks, W. and S. L. Wyandottes, L. Brahmas, \$1.50 to \$2.00 per 15.

Toulouse Geese, 20c each. M. H. turkeys, \$1.50 and \$2 per 9.

\$8 per 100. Imported and native high-scoring blood in our yards. Mention Kansas Farmer when writing. America's Central Poultry Plant, J. A. Lovette, Milledgeville, Kans.

White Plymouth Rocks, 15 for \$1.50 per 15.

White Wyandottes, 15 for \$1.50 per 15.

White Leghorns, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Cornish, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

White Pekin, 15 for \$1.50 per 15.

White Leghorn, 15 for \$1.50 per 15.

White Rock, 15 for \$1.50 per 15.

Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service, for the week ending April 30, 1906, prepared by T. B. Jennings, station director:

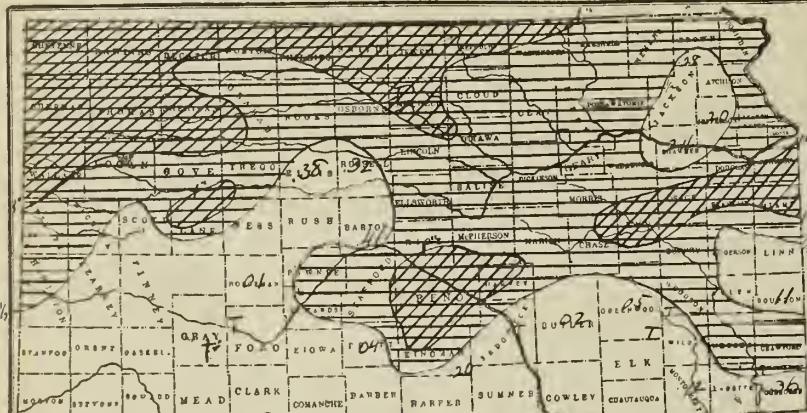
CLIMATOLOGICAL DATA FOR THE WEEK.

	Temperature.	Precipitation				
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
WESTERN DIVISION.						
Cimarron.	89	36	62	...	T	...
Coiby.	94	37	60	...	1.87	...
Coolidge.	84	33	58	...	0.58	...
Dodge City.	89	38	64	+8	T	-44
Dresden.	91	40	62	...	0.97	...
Farnsworth.	94	38	63	...	1.03	...
Gove.	90	43	..	0.75	...	...
Hoxie.	92	41	62	...	1.05	...
Jetmore.	93	42	66	...	0.01	...
Norton.	92	42	..	0.95	...	...
Scott.	92	37	62	...	0.28	...
MIDDLE DIVISION.						
Burr Oak.	90	41	63	...	1.98	...
Clay Cntr.	90	40	66	...	0.47	...
Concordia.	90	45	64	+6	0.62	+0.03
Eldorado.	86	45	..	0.02	...	...
Ellinwood.	90	42	66	...	0.41	...
Hays.	93	39	63	...	0.33	...
Macksville.	88	42	64	...	0.64	...
Medicine Lodge.	90	42	65	...	0.70	...
Pratt.	89	44	67	...	0.04	...
Republic.	91	41	62	...	1.92	...
Russell.	93	41	66	...	0.32	...
Salina.	93	41	66	...	0.74	...
Wichita.	86	45	67	+6	T	-7.78
EASTERN DIVISION.						
Atchison.	88	46	65	...	0.80	...
Burlington.	88	45	67	...	0.72	...
Columbus.	85	45	66	...	0.36	...
Cottonwood Falls.	88	42	67	...	0.90	...
Emporia.	87	45	66	...	1.80	...
Fall River.	88	46	68	...	T	...
Frankfort.	91	41	64	...	0.85	...
Grenola.	87	44	66	...	...	...
Independence.	90	45	69	...	0.12	...
Iola.	86	47	67	...	0.61	...
Kansas City.	87	48	66	+9	0.67	-0.09
Olathe.	82	45	64	...	1.30	...
Oswego.	85	48	68	...	...	...
Pittsburg.	87	47	68	...	0.86	...
Topeka.	88	48	66	+5	0.24	-0.51

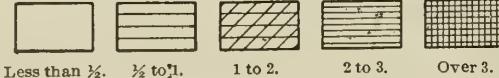
GENERAL CONDITIONS.

The temperature rose rapidly during the first days of the week, reaching the maximum on the 23d in the western and central divisions, and on the 24th in the eastern division. On the 23d the temperature in the northern

RAINFALL FOR WEEK ENDING APRIL 28, 1906.



SCALE IN
INCHES:



Less than 1/2. 1/2 to 1. 1 to 2. 2 to 3. Over 3. T, trace.

half of the western and middle divisions reached 90° and over; the highest being 94° at Coiby and Farnsworth. The minimum temperatures occurred in the western division on Friday or Saturday but in the middle and eastern divisions the minimum temperatures generally occurred on Sunday. On the 27th and 28th the temperature fell below 40° in the southern and western counties of the western division; the lowest temperature, 33°, occurring at Coolidge. The precipitation generally occurred on the night of the 26-27th and on the 27th. It was above normal in the northwestern and northern counties; it was also above normal in Lane and Reno Counties and in Chace, Lyon, Osage, Douglas, and Johnson Counties. The precipitation was quite light in the southern counties, several of which report no rain. Hailstorms occurred in the middle and eastern divisions on the 27th, some of them being severe enough to damage windows and gardens.

RESULTS IN DETAIL.

EASTERN DIVISION.

Allen.—The week was warm with abundant sunshine. The mean of the maximum temperatures was 80°. There were high southerly winds on the 24th and 27th. Thunderstorms occurred on the 26th and 27th. A trace of hail fell in the storm of the 26th, but in that of the 27th considerable hail of large size fell and damaged fruit-trees and crops a few miles southwest of Iola. Many of the hail stones measured one and a fourth inches across; near the western part of the county the hail is reported to have fallen to the depth of one inch.

Anderson.—High winds blew the first part of the week. Summer temperatures and clear weather prevailed the first of the week, but it was cooler and partly cloudy the latter part.

Atchison.—The first five days of the week were cloudless. Friday afternoon heavy rain, accompanied by very large hailstones, fell. In two hours, .83 of an inch of rain had fallen. A high wind blew on the 24th.

Brown.—There were five clear days during the week. The highest temperature was 87° on the 24th and the lowest was 43° on the 22d. Rain, accompanied by hail, fell. This was the first rain since the 12th.

Chase.—Clear weather prevailed every day except the 27th, when .90 of an inch of rain fell. There were very high winds on the 23d and 24th.

Chautauqua.—It was clear every day except the 27th, and there was no rain although it is beginning to be needed. Seasonable temperatures were experienced.

Cherokee.—The first of the week was clear but on the 26th rain and quite heavy fell.

curred, followed by clearing and cooler weather.

MIDDLE DIVISION.

Barber.—This has been a dry week with fairly warm weather and several windy days. On the 27th it turned cooler with a north wind.

Barton.—The week was very windy. There were high winds on the 23d, a dust storm on the 24th, and a thunderstorm on the 26th. There were two days clear and five partly cloudy. The maximum temperature was 90° on the 23d; .41 of an inch of rain fell on the 26th.

Butler.—The highest temperature was 86° on the 24th, and the lowest was 45° on the 28th. There was a light shower on the 27th.

Clay.—It was very windy on the 23d, 24th, and the morning of the 25th. The week was mostly cloudy. It was warm the fore part of the week, but it rained on the 27th and was cooler till the week ended.

Cloud.—The temperature ranged from 2° to 16° above the normal on all days but the 25th, when it was lightly below normal. There was a sprinkle of rain on the 24th, and some good showers on the 26th and 27th. It was clear the first day but from that time the cloudiness gradually increased.

Dickinson.—There were high winds on the 24th and 25th, and a fine rain of .70 of an inch on the 26th.

Ellis.—The atmosphere was hazy and smoky on the 22d and 23d. On the 24th there were high winds and a dust storm. The 25th was a clear day. Scattered thunderstorms occurred on the 26th. The 27th was showery and cooler with northwest winds. It cleared up on the 28th, but continued cool. The maximum temperature was 93° on the 23d.

Elliott.—The maximum temperatures ranged in the eighties and nineties till the last two days, when cooler weather was felt. There was .75 of an inch of rain on the 26th with a thunderstorm.

Jewell.—There were four days of high winds and three thunderstorms. It was generally warm and sunny up to the 26th, when 1.98 inches of rain fell.

Kingman.—Clear weather with maximum temperatures in the eighties prevailed every day up till the 25th, when it became a little cooler. A minimum temperature of 42° was observed the morning of the 25th! There was some hail on the night of the 26th.

McPherson.—Rain and heavy hail which cut down some fruit occurred on the 26th. It was cool the last of the week but there was no frost.

Ottawa.—The weather was windy and very drying the first of the week. It was cooler

with plenty of rain the last of the week. The highest temperature was 90° on the 23d.

Pawnee.—The weather was warm with strong southerly winds the first of the week. On the 26th it rained and the next day northwesterly winds made it much cooler.

Pratt.—Warm weather and high winds prevailed the first of the week, but it was cooler the last two days with a light shower and a thunderstorm on the 27th. The highest temperature was 89° on the 23d, and the lowest was 44° on the 28th.

Reno.—Clear, sunny weather with high temperature was experienced till the 26th, when increasing cloudiness began, followed by a rain of 1.45 inches the 27th and cooler weather. There was a little hail the night of the 26th and 27th.

Republic.—The fore part of the week was clear and warm with high winds. On the 26th and 27th showers fell with thunder and hail on the 27th. Some very threatening clouds were seen on the 27th and some damage from wind was reported.

Russell.—The temperature was considerably above normal the first of the week with a maximum temperature of 93° on the 24th. It rained on the 26th and 27th, and this was followed by cooler weather.

Saline.—The temperature reached 93° on the 24th, but it gradually became cooler from that date. On the 27th there was a severe thunderstorm and some hail. .74 of an inch of rain fell on that date.

Sedgwick.—It was a warm week. The temperature averaged 6° above the normal. There were five clear days and two partly cloudy ones. Traces of rain fell on the 24th and 27th.

Stafford.—The maximum temperature ranged in the eighties on five days. There was a good rain on the 27th. The temperature fell to 43° the morning of the 28th.

The Great Wichita Sale
Wichita, Kansas, May 17, '06

At G. D. Morgan's Barn, West Douglas Ave.

Herefords and Shorthorns



MANY CHOICE CATTLE ARE LISTED

ADDITIONAL ENTRIES ACCEPTED.

HEREFORDS

A carload by the great prize-winning Anxiety 4th sire, Brigadier 109729, from W. G. Swinney's Clover Leaf Farm, Bois d'arc, Mo. Also a notable consignment from S. L. Stadisch, Hume, Mo. The owner of the great Onward 4th and other good ones from H. Monroe, Lyons, Kans.; N. Mulzen, Newton, Kans.; Frank Rockefeller, Belvidere, Kans.; G. L. Rinehart, Kans., and others.

SHORTHORNS

Scotch and Scotch-topped Young Marys. Rose of Sharons, Belinas, Rubys, Carolines, etc. From the herds of Henry Stunkel, Peck, Kans.; F. H. Foster, Lyons, Kans.; Locust Grove Farm; R. W. Swain; Henry Berline; M. D. Crittenden; and others.

BULLS

A superb lot of both breeds bred in the purple and splendidly conditioned. Also high class females. Additional entries, \$15 per head. Send pedigrees at once. Catalogues ready. Address

D. R. Mills, Manager, Des Moines, Iowa

Mention Kansas Farmer.



"OUT THERE IN KANSAS"

Subscription, 25 Cents a Year.

All about the chicken industry in Kansas, the bees and pigeons. Full of information illustrated and made plain for practical people. The paper that reaches the chicken folks. If you are interested in poultry, bees or pigeons, THE HEN will interest you. Address

THE HELPFUL HEN,
Topeka, Kansas.

FREE UNTIL CURED

Blood Poison, Cataract, Deafness, Asthma, Stricture, Sexual Weakness, and Consumption.

No Deposit or C. O. D. scheme, I trust to your honor to pay when cured

M. G. SLOCUM, M. D.

203 East Douglas Ave., Wichita, Kansas

SCALES

ALL STYLES
LOWEST PRICES

30 DAYS
FREE TRIAL

FREE
CATALOGUE

AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO

cool weather at the end of the week. The maximum temperature, 92°, occurred on the 23d, but on the morning of the 28th the temperature had fallen to 37°. .28 of an inch of rain fell on the 28th.

Sheridan.—Ideal weather has prevailed. The fore part of the week was warm, the latter part cool. 1.05 inches of rain fell on the 27th. The temperature ranged from a maximum of 92° on the 23d to a minimum of 41° on the 27th and 28th.

Thomas.—This has been a week of warm days and cool nights. There was a good shower on the 24th, and a rain of 1.44 inches on the 27th. The maximum temperature was 94° on the 24th, and the minimum 37° on the 27th.

Blessed is the man who has the gift of making friends, for it is one of God's best gifts. It involves many things, but above all is the power of going out of oneself and seeing and appreciating whatever is noble and loving in another man.—Thomas Hughes.

EVERGREEN STOCK FARM

DARLING BROTHERS, Proprietors, Nellie, Ohio

Will Sell at Public Auction at

Mankato, Kansas, May 5, 1906

20 Head of Scotch-Topped Shorthorn Cattle

For catalogue apply to

C. DARLING, Randall, Kansas and COL. JOHN BRENNEN, Auctioneer, Esbon, Kansas

Grain in Kansas City.

Receipts of wheat in Kansas City today were 56 cars; Saturday's inspections were 45 cars. Offerings were fair and the demand was poor. The mills were practically out of the market. Prices were unchanged to 1c lower, and lowest at the close. A number of cars remained unsold. The sales were: No. 2 hard, 2 cars 79c, 5 cars 78c, nominally 77@80c; No. 3 hard, 1 car 76c, 2 cars 75c, 1 car 74½c; No. 4 hard, 1 car 72c, 1 car 71c; rejected hard, 1 car 62c; No. 2 red, nominally 88@90c; No. 3 red, nominally 85@88c; No. 4 red, nominally 70@84c.

Receipts of corn were 129 cars; Saturday's inspections were 66 cars. Offerings were the largest in some time past. The demand was fair. Prices were ½@¾c lower, as follows: No. 2 white, 8 cars 47c, 7 cars 46½c; No. 3 white, 4 cars 46½c; No. 2 mixed, 20 cars 47c, 6 cars 46½c; No. 3 mixed, 4 cars 46½c; No. 2 yellow, 9 cars 47c, 4 cars 46½c; No. 3 yellow, 3 cars 47c.

Receipts of oats were 5 cars; Saturday's inspections were 8 cars. Prices were about the same as Saturday, as follows: No. 2 white, nominally 33@33½c; No. 3 white, 1 car 33c, 1 car 32c, 1 car colored 31½c; No. 2 mixed, nominally 32@31½c; No. 3 mixed, nominally 31@31½c.

Barley was quoted 42@44c; rye, 55@57c; Kafir-corn, 80@85c per cwt.; bran, 35c@\$1; shorts, 98c@\$1.01 per cwt.; corn-chop, 92@94c per cwt.

Kansas City Live-Stock Market.

Stock Yards, Kansas City, Mo., April 30, 1906.

A decided upturn in the cattle market was the feature last week. Few cattle came in after Wednesday, but such as did come got an advance of 20@30c over Monday's prices. This strong market had the effect of drawing in a big supply to-day, 11,000 head here, and liberal elsewhere, but the market is holding up steady to-day. The scarcity of highly finished beef steers is more accentuated every week, steers is more accentuated every week, the best here last week selling at \$5.55, 20c less than the top the previous week, although the market was higher last week. Top prices to-day are \$5.35 for steers, sorted heifers and yearling \$5.25, feeders \$5. A train of Nevada hay-fed steers, fed for San Francisco market, but turned this way on account of the earthquake, sold to the packers here to-day at \$4.20@4.65.

The month of April shows more cattle received here than ever before in April, 157,300, as compared with 125,000 last April, and 133,500 largest previous April, in 1903. The increase from native territory is even greater than the figures indicate: last year we received 8,000 cattle from Southern Texas in April, while this year in April only a few have come from that source. The supply has dwindled in the last two weeks, and big runs on Monday and Tuesday is followed by small supply and strong prices later in the week; it may be that way this week. Bulk of steers sell at \$4.65@5.30, heifers \$4.25@5, cows \$3.25@4.50, canners and stock cows and heifers \$2.25@3.40, bulls \$3@4.25, calves \$3@6, stockers \$3.35@4.60, feeders \$4@4.90.

Hog run last week was 52,000 head, supply to-day 10,000, market 5@10c lower to-day, top \$6.42½, bulk of sales \$6.25@6.40, light weights up to \$6.32½, pigs \$5.25@6. The market was lower the middle of last week, but best hogs sold at \$6.50 Saturday, and it looks like receipts of around 50,000 hogs per week can be handled at the high level now ruling. Supply for April shows a gain of 40,000 head over last April, and prices have averaged \$1 higher, which indicates the strength of the demand.

Lambs gained 25@40c last week, as the end of the fed lamb season is in sight. Best lambs sold at \$7.20 to-day, and more than fifty doubles of wooled lambs brought \$7 or better since middle of last week. Sheep prices were not fully tested, but gained 15@25c last week, wooled yearlings quotable at \$6@6.30, wethers up to \$6.15, ewes \$6, clipped wethers and yearlings \$4.75@5.50, lambs \$5.75@5.95, ewes \$4.50@5. Run to-day 5,000, market strong to 10c higher.

J. A. RICKART.

South St. Joseph Live-Stock Market.

South St. Joseph, Mo., April 30, 1906.

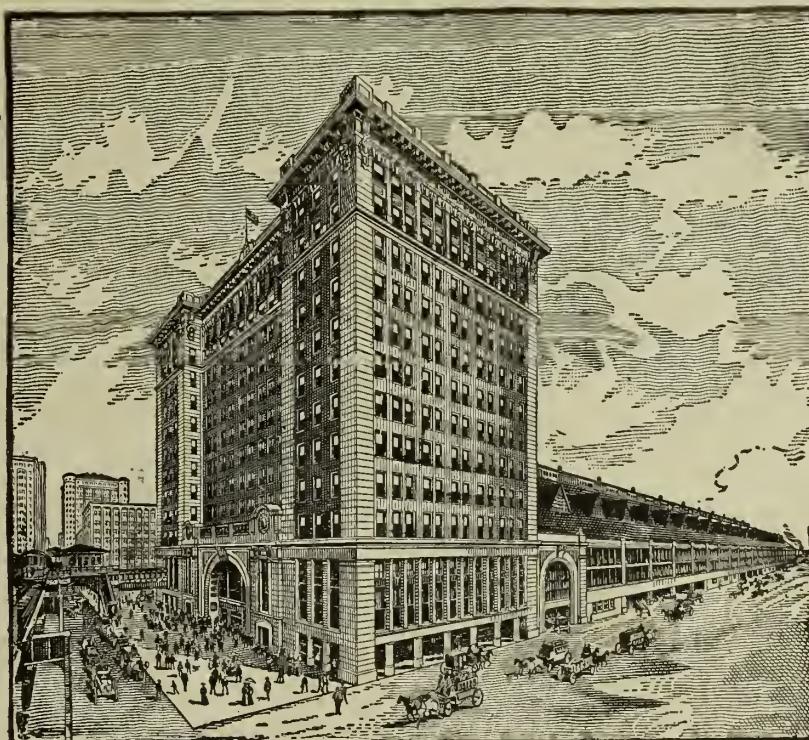
As was anticipated at the close of last week, there was a marked increase in the number of cattle being forwarded for the opening trade of this week, locally the supply was nearly double that of a week ago, while five leading markets showed an increase of around 11,000. In the face of the fact that the Chicago market was 10@15c lower, the local trade ruled fully steady on good demand for everything in the beef-cattle line. The quality of steers was not better than ordinary to medium, there



La Salle
Street
Station,
Chicago



Only one
on the
Elevated
Loop



Used by Rock Island-Frisco Lines

Have YOU ever been in CHICAGO?

If so, you know the extremely convenient location of La Salle Street Station.

If you are a stranger in the city, however, it is of great importance that you learn about this magnificent and comparatively new terminal, used jointly by Rock Island-Frisco Lines—C. R. I. & P. Ry. and C. & E. I. R. R. It is nearest the heart of the city—closely adjoining the business section—with easy walking distance of State Street shopping center and all the principal hotels.

Another advantage of entering the city through La Salle Street Station is the second-story viaduct directly connecting the main waiting-room with the Elevated Railroad loop—you can reach the North, Northwest, West or South sides of the city by elevated trains for a five cent fare without descending to the street. You thus avoid the dangers and delays of the great, crowded city.

The Rock Island right-of-way into Chicago is elevated for more than eight miles out through the suburbs. Prompt arrival at Chicago terminal is thus assured. Englewood Union Station, seven miles out, affords ready access to southern suburbs—all through trains stop there.

Where you will land is an item to consider.

JOHN SEBASTIAN, Passenger Traffic Manager, Rock Island-Frisco Lines, CHICAGO and ST. LOUIS.

heing absolutely nothing on choice weighty order here, the best being just a fairly fatted bunch of 1,300-pound steers on coarse and uneven order that sold at \$5.15. The bulk of steers were light to medium weights that sold between \$4.60@5 with common light killers going at \$4@4.50. Supplies of butcher stock was meager and the demand good enough to hold prices fully steady in the common helper line. The best helpers sold at \$4@4.25. The stocker and feeder trade was quiet on light supply, the local dealers not showing desire for big receipts. The outlook of the trade seems favorable should supplies not be forced up to big figures.

Hog supplies were fairly liberal in the total at five markets, but they were largely bunched into Chicago, forcing a break of 10@15c on that market, which was immediately reflected on trade at the river. Opening sales at the market were around 5c lower than the close last week, but there was further weakening as the day advanced and the bulk of sales showed 5@10c decline, top hogs sold at \$6.45 and the bulk at \$6.30@6.35. The market was quite active at the decline. The outlook seems to favor gradually weakening prices unless the country should curtail receipts, as packers have got them started down now and will no doubt continue to play their cards for a lower level.

The sheep market continues in good condition with prices on an upward trend, tops here to-day sold 25c higher for lambs than last week, but some of this was due to excellence of quality and the market in reality could not be quoted over 10@15c higher for lambs, while sheep were strong to 10c higher,

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot brooder house, 20 brooder houses, capacity of plant, 4,000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

top lambs sold at \$7.25, clipped lots at \$5.90, with prime woolled wethers at \$5.85.

Cure Your Horse and Work Him Too.

After a winter of inactivity, the horse is jammed into heavy spring work with the consequence that he acquires a collection of saddle gallis, colic, gall, or sore shoulders.

Without interfering with the work or laying the horse up for repairs, he can be cured by the use of Bickmore's Gall Cure while he works. This is an old guaranteed remedy that has been on the market for years and is useful for chaps, bruises, speed crack, wrie cuts, or cracked cows' teats. A sample

of this unequalled remedy can be had for 10 cents (to pay the postage) by addressing the Bickmore Gall Cure Company, Old Town, Me. An illustrated book is sent free with the sample.

Every Tuesday, balneum of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

When writing our advertisers please mention this paper.

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
Kansas Farmer Co.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electrolytes must have metal base.

Objectable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.

116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

HOLSTEINS—One yearling bull, extra choice, H. B. Cowles, Topeka, Kans.

FOR SALE—at the sale pavilion, Ottawa, Kans., Saturday, May 12, 1 p. m., by the breeders of Franklin County, 45 registered Shorthorn cattle, 20 bulls and 25 females. Farmers wanting a good young bull or females would do well to attend this sale. We do not expect laucy prices, as the cattle have had no special fitting. C. F. Wolf, Mauager.

A BUTTER-BRED Holstein bull calf—The best purchase for grade dairy herd. See report Santa Fe Dairy Educational Special. Start right in your breeding. Sixty-five head to choose from. Geo. C. Mosher, Hillcrest Farm, Greenwood, Neb.

FOR SALE CHEAP—One good red registered Shorthorn bull. Kind and gentle. Address J. E. Williams, Fairmount, Kans.

REGISTERED HOLSTEINS and Jerseys of best milk and butter families. Youngsters at reasonable prices. Burton & Burton, Topeka, Kans.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts, 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

FOR SALE Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, color dark red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

PURE SCOTCH BULLS—A Butterfly, a Love-lady and my herd bull. Cows and heifers. Prices right. Geo. W. Wright, Windom, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGRIED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruikshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. better 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 28-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

FOR SALE Five pure-bred yearling Short-horn bulls. Will be pedigreeed in name of buyer; sired by Teddy Roosevelt 19274. Good, useful bulls at living prices. Henry Haub, Whiting, Kans.

SEEDS AND PLANTS.

NICE RE-CLEANED ALFALFA SEED FOR SALE. Guaranteed pure; \$8 per bushel. H. L. Heaton, Oberlin, Kans.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Mauston, Kans.

SEED CORN—Finch's pure-bred Silver King, white, \$1.25 per bushel, ear or shelled. Address J. H. Glotfelter, Emporia, Kans.

PLANTS FOR SALE—Cabbage, Henderson's Early Summer, Succession, 30 cents per 100; \$2.50 per 1,000. Tomatoes, Early Dwarf Champion, Beauty, Stone, Matchless, 30 cents per 100; \$2.50 per 1,000. Sweet Potatoes, Yellow Jersey, Yellow W. Nansmond, 20 cents per 100; \$1.50 per 1,000. Red Jersey, Red Bermuda, Black Spanish Southern Queen, Vineless 25 cents per 100; \$1.75 per 1,000. F. P. Rude & Son, Box 671, North Topeka, Kans. Phone 4003.

THE KANSAS FARMER

HORSES AND MULES.

FOR SALE—A good black heavy-boned Jack. Price, \$250 if sold soon. Do not write but come and see him. I also have others for sale, cheap. Address Joseph Pizinger, Box 14, Olmitz, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 6 draft stallions, 20 coach stallions and 40 jacks at one-half the regular price. Write for bargains.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swayed back. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire hogs that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kans.

AGENTS WANTED.

WANTED—A hustling agent in every community for the best paying preparation ever offered. Ginsu Chemical Company, Wichita, Kans.

HELP WANTED.

WANTED AT ONCE—A man to work on the farm by month. Good wages to the right man. F. M. Gordou, Eudora, Kans.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

MISCELLANEOUS.

SUGAR BEETS IN THE ARKANSAS VALLEY—Laborers for thinning and cultivation needed very shortly. 15,000 acres of beets are grown for the American Beet Sugar Company by farmers near Lamar, Prowers, Las Animas, Rocky Ford, Manzano and Fowler. Hundreds of men and boys needed for work in the beet fields. Farmers will pay 15 cents per hour for day labor, but contracts by acre preferred and more remunerative to the laborers. Laborers board themselves. Work will commence the latter part of May. For further information write the American Beet Sugar Company at Lamar, Colorado. Single hands or families coming to the valley about the 20th of May will also find profitable work. American Beet Sugar Company, Rocky Ford, Colorado. American Beet Sugar Company, Lamar, Colo.

DISCRIBE YOUR WANTS—We submit them to our customers free. Mutual Benefiten, Omega, Oklahoma.

VALUABLE Receipts for removing Freckles, Smallpox Pits; also Liquor Cure. All three, 25c. WARD ECKLER CO., Box 271, Davison, Mich.

NOTICE—My application for a permit to sell intoxicating liquors, according to law at 115 E. 5th St., in the 21 ward of the City of Topeka, is now on file in the office of the Probate Judge of Shawnee Co., Kansas. The hearing of the same is set for May 26, 1906, at 9 o'clock a. m. C. R. Hoyt.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; 8c 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kansas.

GOOD POSITIONS as salesmen now open in every state. Experience unnecessary if a hustler. Steady work, good pay and promotion. Apply at once to Morotock Tobacco Works, Box D51, Danville, Va.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

WANTED—At once sound young men for firemen and brakemen on railroads; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$7.50 to as high as \$155.50 per month. Wanted 400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 124 State St., Chicago Ill.

Generous Combination Offer

The Kansas City Post, a new, metropolitan, Democratic Daily (per year).....\$3.00
Poultry Culture, an interesting monthly poultry journal (per year).....50
The Kansas Farmer.....1.00
\$4.50

We have completed arrangements whereby we can furnish ALL THREE PUBLICA-TIONS for only.....\$2.50

THE POST is a good live, Democratic Daily paper containing all the news of importance, complete and accurate market reports; a page devoted to the women folk and the home as well as a page devoted to sports.

THE POULTRY CULTURE is one of the best poultry journals published and is of particular interest to those already engaged or about to engage in the poultry raising business.

Here is a splendid opportunity for you not only to get a good live Daily, a splendid poultry and the "Old Reliable" Kansas Farmer about half price.

SUBSCRIBE AT ONCE—

Address
THE KANSAS FARMER COMPANY
Topeka, Kans.

REAL ESTATE.

FARMERS!

There's Land Waiting For YOU In NEW ZEALAND

The Paradise of the Pacific; Sixteen Days Steam from San Francisco

THERE IS ROOM FOR THOUSANDS OF SETTLERS

Rich Soil. Abundance of Water. No Droughts. No Snow-bound Winters. Mild and Equable Climate. A Land of Peace and Plenty.

New Zealand's WEALTH Per Head of Population is the Highest in the World.

ITS DEATH RATE IS THE LOWEST IN THE WORLD.

Government land is obtainable on easy terms, perpetual leasehold or freehold. Government assistance to new settlers. State loans to farmers at low rate of interest.

New Zealand is a magnificent dairying, meat-raising, lumber and wool-growing country. Last year the produce of the farms of New Zealand totaled a value of one hundred million dollars.

New Zealand Railways are owned by the Government. Cheap freight and passenger rates.

Government and Municipal ownership of public utilities. Government Trust Offices, Insurance, Savings Banks, etc.; Government Sanatoria and Hot Mineral Water Spas.

New Zealand is a region of grand and novel scenery. It is largely visited by American tourists who escape the rigors of winter.

A land of splendid sport. Trout-fishing and Deer-stalking. Thousands of miles of angling waters carrying the biggest trout in the world.

It is SUMMER in New Zealand when WINTER in America. New Zealand's summer is cool and enjoyable for traveling. Comfortable hotels. Good Transportation. Cheap rates.

YOU WILL FIND OUT ALL ABOUT NEW ZEALAND

by dropping a postcard asking for information and literature to

T. E. DONNE, Superintendent, Government Department of Tourist and Health Resorts,
Wellington, New Zealand
Mail Steamers from San Francisco to New Zealand Every Three Weeks.

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 966, Wichita, Kans.

LAND FOR SALE
in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route, 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 34 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

160 ACRES—ALL BROKEN—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—ALL FENCED—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Plainville, Kansas.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentice, 156 Wabash Ave., Chicago.

FOR SALE OR TRADE—A 20-room rooming-house, splendid location, good condition, built about six years, in Pittsburg, Kans., one of the best cities in the West; excellent school facilities, city high school, State manual training normal. Property belongs to us individually, not real estate men. We want to sell or trade for clear land in Kansas. Price \$4,000; incumbrance, \$1,200. BOX 66, PITTSBURG, KANS.

Stray List

Week Ending May 3.

Greenwood County—W. H. Bonnett, Clerk.

HOGS—Taken up by Chas. M. Mote, in Eureka, April 3, 1906, one large 2-year-old black hog, white face and feet; valued at \$15, also one large 18-month old black hog, white face and feet, valued at \$10.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY

418 Kansas Avenue, Topeka, Kans.

When writing our advertisers please mention this paper.

Collections made in all parts of the United States
No fee charged unless Collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

KANSAS

Special attention given to stock-breeders accounts

Reference furnished on application.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

A CONCRETE SILO
Gedney Farms, White Plains, N. Y.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Money to Loan

On Eastern Kansas Real Estate

Semi-annual, or annual interest, five, seven, or ten years time, with privilege of payments at any interest period.

No Delay in Furnishing Money . . .

Merriam Mortgage Company

Columbian Bldg., Topeka, Kansas

FOR SALE—Choice fruit ranch, 20 acres near Santa Fe, New Mexico; apple orchard, full bearing. Splendid house, complete in every particular. Flu- est climate in the world; high price for fruit. Small first payment takes it. Write to-day to owner W. H. Wise, Santa Fe, New Mexico.

320 ACRES, 6 miles from Emporia; 6 room house, barn 30 by 36, cattle-shed 20 by 40; good orchard and other fruit, 70 acres cultivated; 300 acres can be plowed or mowed; watered by wells and creeks; one mile to school. Price \$25 per acre. Can give immediate possession. Hurley & Jennings, Emporia, Kans.

FOR SALE—Coal land, farms, and timber. The place for a poor man to get a home. Campbell, box 1453, Fort Smith, Ark. Real estate man need not apply.

EXCHANGE—All kinds of properties for trade or exchange. Also large lists of farms for sale. If any thing of this kind interests you write us at Minneapolis, Florence or Salina, Kansas. Garrison & Studebaker

FOR SALE—320 acres in Kiowa Co., 80 in wheat, which goes with the place. Six miles from county seat. Price, \$3,100. C. W. Phillips, Greensburg, Ks.

440-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Bannum, Arlington, Kans.

FOR SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Heusted Realty Co., Clay Center, Kans.

KANSAS LANDS—I have a choice lot of well-improved farms in Marion County, varying from \$20 to \$50 per acre. Also large lists of Western Kansas lands. For full particulars, address A. S. Quisenberry, Marion, Kans.

A 320 ACRE FARM within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Bannum, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

FOR SALE

Farm 2,160 acres, 570 acres in wheat, 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Ks.

F FARMS WANTED

Will the owner of a well improved productive farm kindly communicate full description, price and terms to the undersigned. Cash will be paid if price suits. Possession to be given in the fall. Address Box 983, Minneapolis, Minn.

Rooks County Land

Where Wheat, Corn and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DIEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

Looking for Land?

Come to Downs, Kans., a thriving city of 1,500 people, 200 miles west of Atchison, division point on the Missouri Pacific railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. THE DOWNS REALTY CO., Downs, Kansas.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4¢ for finely illustrated 64 page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

OZARK COUNTRY,
819 Wainwright, St. Louis.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Population, 1,000, 37,714
Population, 1,006, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

Crimson Wonder 38755 Herd

Will have something fine to offer. Can furnish trios not skin sired by Crimson Wouder 38755 and Kerr's Champion 28355.
Mr. & Mrs. Henry Shrader, Wauwata, Kas.

Egypt Valley Durocs

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

Orchard Hill Herd of Duroc-Jerseys.

Summer and fall boars and gilts for sale, sired by Kaughn Chief, grandson of Ohio Chief. Gilts bred to Nortons' Top Notcher by Tip Top Notcher.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled

A few fall boars by State Fair prize winners and Red Polled bulls for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

Square Deal Stock Farm

Wm. D. Calder, Prop., Bancroft, Kans.
We have for sale at \$2 each, two Poland-China boars, sired by Square Deal 36749 by Highland Chief Jr. 23364, dam Daisy Calder (87343) by Calders Perfection (33581).

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

**Highland Herd
of Duroc-Jersey Swine**

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

STEELE'S DUROCS

I have eight boars of December farrow, weighing about 75 or 80 pounds, that are by Paul Wonder 26235, Hunt's Model and Afton by Oom Paul 2d. This is a good herd boar material, and the price is right. I shall have for future delivery boars by Steele's Model 107654 by Chief Orlon 28317, and a few by Paul Wonder. Please write me your wants.

C. G. STEELE, Barnes, Kansas

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 33349; also a boar pig by Compromised 88203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hogs, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

Axlines

Poland-Chinas and Barred Plymouth Rocks

Eggs \$1 per sitting. Choice fall pigs, either sex.

E. E. AXLINE Oak Grove Missouri

John Bollin Route 5
Leavenworth, Kansas

Breeds and sells Poland-Chinas popular.

The State and World's Fair winning boars Nemo L's Duke and The Picket in service. Bred sows and serviceable boars for sale.

Oak Grove POLAND-CHINAS...
Nemo L's Duke, prize-winner and sire of winners and Sir Darkness out of Darkness and by Chief Perfection 2d in service. A few boars for sale

Gus Aaron,
Route 5 - Leavenworth, Kansas

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

Decatur County Herd of POLAND-CHINA SWINE
12 fall boars for sale out of Chief Tecumseh 2d and Corrector sows, and sired by King Perfection by Royal Perfection. I will sell them right.

R. H. WEIR, Route 3, Oberlin, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also gilts, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office). Wellington, Kans.

CEDAR GROVE HERD

Of pure-bred POLAND-CHINA HOGS
We will have some bargains this season to offer the public.

J. A. Hebrew, Stockton, Kans.
Meetion Kansas Farmer when you write.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans.

C. F. Hutchinson, Bellaire, Kansas
Thirty Years a Breeder of
Poland-China Swine

We raise the big fellows that farrow large litters. The kind that fills the pork barrel. Write us for list of our winners at Nebraska and Kansas State Fairs. Our herd boar Bright Look weighs 1,000 pounds in show condition. Stock for sale. If you want the big kind write us.

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd boars. Sows and gilts of choicest breeding bred, for sale, to either Address

**G. M. Hebbard,
Route 2, - Peck, Kansas**

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINA Bred Sows

Have a few choice gilts bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

Chester-Whites

O. I. C. SWINE

Choice young stock of both sex for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair

CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowl. I won 18 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs

Scotch Collie Dogs

B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmore Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,

H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Boars closely related to our Worlds Fair Winners ready for buyers.

Headquarters for up-to-date Chester-Whites

O. L. KERR, Independence, Mo.

Berkshires

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jonlist topfer 76277.

Wm. McAdam, Netawaka, Kans.

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Comptou 89195.

W. J. Grist, - Osawkie, Kans

Ridgeview Berkshires

SOLD OUT except one yearling boar. Get in your order for pigs of spring farrow. One herd boar for sale.

**MANWARING BROS.,
Rout 1, Lawrence, Kan.**

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds.

40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Hallie 60125, sweepstakes Pan-American sow; Stumpy, Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus

Aberdeen-Angus Cattle

25 Aberdeen-Angus bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

**Address
PARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kas.**

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazelton, Route 7, Springfield, Mo. Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

**GEO. GROENMILLER & SON,
ROUTE 1, POMONA, KANSAS**

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see.

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning RED POLLED CATTLE.

Serviceable bulls for sale at prices to sell them.

WILKIE BLAIR, Route 3, Girard, Kansas

RED POLLED CATTLE

Of the choicest straights and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens

Address, S. C. BARTLETT,

Route 5. - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blocky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

Herefords

Registered Herefords

Individual merit and choicest breeding. Dale Dupl. 2d at head of herd. Correspondence solicited.

A. JOHNSON, - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56011 and Lord Albert 131557 head of herd. Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

CANEY VALLEY

Herefords

Bea Donald 4th 8641 and Disturbance 129139 in service. Herd founded from best Missouri and Indiana herds. A carload of choice Bea Donald bulls, 12 to 24 months. Young bulls and 25 halfers 8 to 30 months old for sale. Come and see or write at once.

L. H. Sullivan, Cedarvale, Kansas

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 66634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

Shorthorns

Shorthorns**Shorthorns and Poland-Chinas**

FOR SALE—40 sows and gilts bred; 12 bulls, 50 cows, 55 heifers, all red. Write or see me at once for bulls.

George Chinnon, Hope, Kansas

M. C. VANSELL Muscotah, Kansas
Breeder of Scotch and Scotch Topped Shorthorns, choice Poland-Chinas and Barred Plymouth Rock Chickens. For sale a pure Scotch bull. Order eggs now at 75 cents per dozen.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by
L. A. MEAD,
Kingsdown, Ford County, Kansas
For Sale—Bulls and females. Inspection invited.

Ashcraft Shorthorn Herd

The Scotch Victoria bull Scottish Minstrel 234970 at head of herd

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldinch, full sister to the champion Lavender Viscount in service. Cruckshank and Cruckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds**of Shorthorns and Berkshires**

Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72863 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. Yates Center, Kans.

Shorthorns at Auction

May 16, 1906

Will sell my entire herd including cows and heifers got by Master of the Grove 161274.

J. W. Baker
Strong, Chase County, Kansas

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Horses and Mules**Do You Want to Buy a Jack?**

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

Kentucky Jacks and Stallions

25 Choice Registered Black Jacks, 15 to 18 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Haddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to register, weight about 1,700 pounds 4 and 10 years of age.

One Black Percheron Stallion

Brilliant 40160, 12 years old, and Monarch 151, 13 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or Jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, - Bayview, Kansas

KANSAS FARMER

Fifteen Months for \$1.00

Thirteen Weeks **FREE**

Holsteins

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS
Young Bulls and a few young Cows
and Heifers for sale.

Ashcraft Shorthorn Herd

The Scotch Victoria bull Scottish Minstrel 234970 at head of herd

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldinch, full sister to the champion Lavender Viscount in service. Cruckshank and Cruckshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds**of Shorthorns and Berkshires**

Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72863 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. Yates Center, Kans.

Shorthorns at Auction

May 16, 1906

Will sell my entire herd including cows and heifers got by Master of the Grove 161274.

J. W. Baker
Strong, Chase County, Kansas

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Horses and Mules**Do You Want to Buy a Jack?**

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

Kentucky Jacks and Stallions

25 Choice Registered Black Jacks, 15 to 18 hands high, 2 to 6 years old, to select from at our barns at Marion, Kans. The largest and best bunch ever shipped from Kentucky; also Haddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to register, weight about 1,700 pounds 4 and 10 years of age.

One Black Percheron Stallion

Brilliant 40160, 12 years old, and Monarch 151, 13 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or Jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, - Bayview, Kansas

KANSAS FARMER

Fifteen Months for \$1.00

Thirteen Weeks **FREE**

FIFTH TERM
JONES' NATIONAL SCHOOL
OF
Auctioneering and Oratory
Davenport, Iowa

6th term opens July 22, 1906. All branches of the work taught. Students now selling in 18 states. For Catalogues write Garey M. Jones, President.

Horses and Mules**200 HEAD****Imported German Coach, Percheron and Belgian Stallions on Hand.**

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.**REGISTERED PERCHERONS.**

Coachers, Saddlers, Big Mammoth Jacks and Jennets. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS, **Westphalia, Kansas.**

CHEYENNE VALLEY STOCK FARM PERCHERONS
Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

ELDORADO STOCK FARM

A choice lot of imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

TO CALIFORNIA AND RETURN

San Francisco or Los Angeles. Tickets on sale April 25th to May 5th, 1906.

\$50.00

FOR THE ROUND TRIP

To accommodate delegates and others to Meeting of the Mystic Shrine this remarkably low round trip rate to Los Angeles has been granted by the

UNION PACIFIC

SHORT LINE FAST TRAINS NO DELAYS

Be sure your tickets read over this line. Inquire of

F. A. LEWIS, City Ticket Agent or J. C. FULTON, Depot Agent



MASTICATOR
THIS \$850. PIG EATS
3 FEEDS FOR ONE CENT

DID YOU EVER SELL A 7 MONTHS OLD PIG FOR \$850.? AND ONE LITTER FOR \$1,657.50?

W. G. CAMFIELD & SON, Breeders of Pure Bred POLAND CHINA HOGS.

INTERNATIONAL STOCK FOOD CO., MINNEAPOLIS, MINN.

GENTLEMEN:—I want to tell you about a fine litter of pigs that I raised last year. As I had a good litter of pigs out of E. L. Delightful I wanted them to do extra well, so I bought one hundred pounds of "International Stock Food" and fed it to them every day up to sale time when they were seven months old. From this litter came Masticator, the highest priced pig that was ever sold at auction at that age. The Goodrich Stock Farm at Eldon, Mo., paid \$850.00 cash for this seven months old pig, which broke all sale records for this age. The entire litter brought \$1657.50. I will certainly continue to feed "International Stock Food" because it is reliable and makes us money. I will soon want another supply.

Yours truly,

W. G. CAMFIELD & SON, Poland China Breeders.

COWDEN, ILLINOIS, JAN. 16, 1906.

GENTLEMEN:—I want to tell you about a fine litter of pigs that I raised last year. As I had a good litter of pigs out of E. L. Delightful I wanted them to do extra well, so I bought one hundred pounds of "International Stock Food" and fed it to them every day up to sale time when they were seven months old. From this litter came Masticator, the highest priced pig that was ever sold at auction at that age. The Goodrich Stock Farm at Eldon, Mo., paid \$850.00 cash for this seven months old pig, which broke all sale records for this age. The entire litter brought \$1657.50. I will certainly continue to feed "International Stock Food" because it is reliable and makes us money. I will soon want another supply.

Yours truly,

W. G. CAMFIELD & SON, Poland China Breeders.

YOUR SOWS WILL RAISE MORE PIGS.

INTERNATIONAL STOCK FOOD CO., MINNEAPOLIS, MINN.

GENTLEMEN:—I have seven Brood Sows that pigged last week, all in four days, sixty-four fine big pigs. Have fed these sows "International Stock Food" every day. Also fed it to sixty head of steers which are doing well. One of my neighbor's hogs had the cholera the first of the year. There was only a wire fence between his hogs and mine. I fed my hogs "International Stock Food" every day. He lost all his hogs except three out of fifty. I am about ready to purchase another hundred pounds of "International Stock Food" as I feed it every day.

Yours truly,

W. B. ELLIOTT.

LIBERTY, MISSOURI.

GENTLEMEN:—I have seven Brood Sows that pigged last week, all in four days, sixty-four fine big pigs. Have fed these sows "International Stock Food" every day. Also fed it to sixty head of steers which are doing well. One of my neighbor's hogs had the cholera the first of the year. There was only a wire fence between his hogs and mine. I fed my hogs "International Stock Food" every day. He lost all his hogs except three out of fifty. I am about ready to purchase another hundred pounds of "International Stock Food" as I feed it every day.

Yours truly,

W. B. ELLIOTT.

INCREASES RICHNESS OF MILK AND SAVES FEED.

INTERNATIONAL STOCK FOOD COMPANY, MINNEAPOLIS, MINN.

GENTLEMEN:—Your "International Stock Food" is the best I ever fed to horses, and I am sure it saved me half of my feed last summer and still my horses were never in a better shape for work than they were last summer and fall. I fed them half the amount of oats I formerly did, and two tablespoons of your "International Stock Food" every meal and the results were very satisfactory to me. Before I began feeding "International Stock Food" to my cows the milk tested 3.7. After the first month of feeding your Food it went up to 3.8-3.9-4.0 and now it is 4.1. Now, it is to be remembered that I do not feed them but a small amount of bran and mix the Stock Food with it, so it pays every time to use "International Stock Food." I am,

Yours truly, VICTOR ELFSTRUM.

"International Stock Food" is prepared from pure, medicinal Roots, Herbs, Seeds and Barks and is fed in small amounts as an addition to the regular grain feed. It Purifies the Blood, Cures and Prevents Disease, Tones up and Permanently Strengthens the Entire System and greatly Aids Digestion and Assimilation so that each animal obtains more nutrition from all grain eaten. It is absolutely harmless for any use or even if taken into the human system. Sold by over One Hundred and Twenty-five Thousand Dealers on a "Spot Cash Guarantee" to give you paying results or your money promptly refunded. We do not compete with cheap and inferior preparations. We guarantee high class medicinal quality and over Two Million Farmers and Stockmen strongly endorse its use because it makes them extra money. Paying results for the feeder is the cause of the extraordinary sale of "International Stock Food" throughout the entire world. WE HAVE THOUSANDS OF SIMILAR UNSOLICITED TESTIMONIALS ON FILE IN OUR OFFICE. TEST IT FOR YOUR PIGS, SHOATS, HOGS, CATTLE, COWS, CALVES, HORSES, MARES, COLTS, SHEEP, LAMBS OR OTHER STOCK ENTIRELY AT OUR RISK. COULD YOU ASK ANY FAIRER OFFER?

DAN PATCH 1:55 $\frac{1}{4}$ IN 6 BRILLIANT COLORS

WITH POSTAGE PREPAID

MAILED FREE

We Have A Beautiful, Six Color Lithograph of Our World Champion Stallion Dan Patch 1:55 $\frac{1}{4}$. It Was Made From Photograph And Shows Dan Hitched To Sulky And Pacing His Fastest Clip. It Also Gives All Of His World Records. This Is A Splendid Horse Picture For Framing. It Is The Most Life Like Picture Ever Taken And Shows Dan Flying Through The Air With Every Foot Off Of The Ground. We Will Mail You One Copy Free, Postage Prepaid, If You Write Us And State How Much Live Stock You Own And Name This Paper.

CAPITAL PAID IN \$2,000,000.

Address INTERNATIONAL STOCK FOOD CO., Minneapolis, Minnesota, U. S. A.



Volume XLIV. Number 19

TOPEKA, KANSAS, MAY 10, 1906

Established 1863. \$1 a Year

PLANT-BREEDING.

The importance of plant-breeding is signalized by the appearance of the fourth edition of a book of nearly five hundred pages from the standard publishing house of The MacMillan Company, New York. "Plant-Breeding" consists of a series of lectures by Prof. L. H. Bailey, of Cornell University. In studying these lectures one becomes impressed with the idea that plant-breeding is only at the beginning, both as a science and an art. The great work is yet to be done. The opportunities are open for the ambitious to enter an almost unexplored field. There are some things fairly well settled, however, and these have been formulated in plain language by Professor Bailey. The most salient practical points are stated in fifteen "Cautions and suggestions." The fifth one of these is here reproduced as an example:

"5. When selecting seeds, remember that the character of the whole plant is more important than the character of any one branch or part of the plant; and the more uniform the plant is in all its parts, the greater is the likelihood that it will transmit its characters. If one is striving for larger flowers, for instance, he will secure better results if he choose seeds from plants which bear large flowers throughout, than he will if he choose them from some one large-flowering branch on a plant which bears indifferent flowers on the remaining branches, even though this given branch produce much larger flowers than those borne on the large-flowered plant. Small potatoes from productive hills give a better product than large potatoes from unproductive hills. The practice of selecting large ears from a bin of corn, or large melons from the grocer's wagon, is much less efficient in producing large products the following season than the practice of going into the fields and selecting the most uniformly large-fruited parents would be. A very poor plant may occasionally produce one or two very superior fruits, but the seeds are more likely to perpetuate the characters of the plant than of the fruits.

"The following experiences detailed by Henri L. de Vilmorin illustrate my proposition admirably: 'I tried an experiment with seeds of Chrysanthemum carinatum gathered on double, single, and semi-double heads, all growing on one plant, and found no difference whatever in the proportion of single and double-flowered plants. In striped verbenas, an unequal distribution of the color is often noticed; some heads are pure white, some of a self color, and most are marked with colored stripes on white ground. I had seeds taken severally from all and tested alongside one another. The result was the same. All the seeds from one plant, whatever the color of the flower that bore them, gave the same proportion of plain and variegated flowers.'

"The second part of my proposition is equally as important as the first—the fact that a plant which is uniform in all its branches or parts is more likely to transmit its general features than one which varies within itself. It is well known that bean plants often produce beans with various styles of markings on the same plant or even in the same pod, yet these variations rarely ever perpetuate themselves. The same remark may be applied to variations in peas. These illustrations only add emphasis to the fact that intending plant-breeders should give greater heed than they usually do to the entire plant, rather than confine their atten-

tion to the particular part or organ which they desire to improve.

"At first thought, it may look as if these facts are directly opposed to the proposition which I emphasized in my first lecture, that every branch of a plant is a potential autonomy, but it is really a confirmation of it. The variation itself shows that the branch is measurably independent, but it is not until the conditions or causes of the variation are powerful enough to affect the entire plant that they are sufficiently impressed upon the organization of the plant to make their effects hereditary.

"There is an apparent exception to the law that the character of the entire plant is more important than any one organ or part of it, in the case of the seeds themselves. That is, better results usually follow the sowing of large and heavy seeds than of small or unselected seeds from the same plant. This, however, does not affect the main proposition, for the seed is in a measure independent of the plant-body, and is not so directly influenced by environment as the other organs are. And, again, the seed receives a part of its elements from a second or male parent. The good results which follow the use of large seeds are, chiefly, greater uniformity of crop, increased vigor, often a gain in earliness and sometimes in bulk, and generally a greater capacity for the production of seeds. These results are probably associated less with any innate heritable tendencies than with the mere vegetative strength and uniformness of the large seeds. The large seeds usually germinate more quickly than the small ones, provided both are equally mature, and they push the plantlet on more vigorously. This initial gain, coming at the most critical time in the life of the new individual, is no doubt responsible for very much of the result which follows. The uniformity of crop is the most important advantage which comes of the use of large seeds, and this is obviously the result of the elimination of all seeds of varying degrees of maturity, of incomplete growth and formation, and of low vitality.

"Another important consideration touching the selection of seeds is the fact that very immature seeds give a feeble but precocious progeny. This has long been observed by gardeners, but Sturtevant, Arthur, and Goff have recently made a critical examination of the subject. It is not the slightly unripe seeds that give a noticeable increase in earliness,' according to Arthur, 'but very unripe seeds, gathered from fruit [tomatoes] scarcely of full size and still very green. Such seeds do not weigh more than two-thirds as much as those fully ripe. They germinate readily, but the plantlets lack constitutional vigor and are more easily affected by retarding or harmful influences. If they can be brought through the early period of growth and become well established, and the foliage or fruit is not attacked by rots or blights, the grower will usually be rewarded by an earlier and more abundant crop of slightly smaller and less firm fruit. These characters will be more strongly emphasized in subsequent years by continuous seed-propagation.' Goff remarks that the increase in earliness in tomatoes, following the use of markedly immature seeds, 'is accompanied by a marked decrease in the vigor of the plant, and in the size, firmness, and keeping quality of the fruit.' These results are probably closely associated with the chemical constitution and content of the immature seeds. The organic compounds have probably not yet reached a state of stability, and

they therefore respond quickly to external stimuli when placed in conditions suitable to germination; and there is little food for the nourishment of the plantlet. The consequent weakness of the plantlet results in a loss of vegetative vigor, which is earliness."

It will be well for every farmer, especially every farmer who desires to be up with the times on matters concerning the selection and breeding of plants, to secure a copy of Professor Bailey's book. The price is \$1.25. It may be ordered through THE KANSAS FARMER.

POISON THE CUT-WORMS.

The season of the festive cut-worm is rapidly approaching, if not already present, with some of the readers of THE KANSAS FARMER. The Oklahoma Experiment Station directs to poison him as well as his company, the frisky grasshopper. This is the way to do it:

"Cut-worms and grasshoppers can be destroyed with poisoned bran, by placing the same in small piles on the infected areas, in the afternoon or evening. These insects not only prefer the bran to vegetation, but are attracted for some distance to it.

"The mash is made as follows: Bran 50 pounds; Paris green 1 pound.

"Thoroughly mix dry.

"Moisten the above mixture with sweetened water (this may be sweetened with two quarts of cheap molasses) and stir to a moist mash, but do not make it sloppy.

"The mash should be used fresh and not put out when sour.

"For cut-worms, the piles should be placed from two to three feet apart each way. For grasshoppers, the piles may be more widely scattered. Usually, it is necessary only to put the poison around the edges, or along one side of the field.

"Do not allow the stock or fowls to get the mash on account of the contained poison."

VACATION OF PROPERTY.

EDITOR KANSAS FARMER:—Please answer this for me, and as there are many such cases, the information would be welcome to many.

A sells his farm to B who lives in another State. A gives B contract for deed, reserving use of the land and possession until March 1 next. B is to pay for the place in full on January 1, 1907. Does A have to stay on the place until March 1 in order to hold the insurance valid and to take care of the place? A, having bought another place, finds it more convenient to move in the fall or at latest January 1. The contract does not say anything about insurance or staying on the place. A only reserved right to retain possession until March 1. B finds it inconvenient to take possession until March 1. XXX.

Marion County.

To construe a contract from an abstract statement is rather uncertain business.

Insurance companies are loth to take or to retain risks on unoccupied property. They will usually cancel insurance on the vacation of the buildings. Sometimes it is possible to have someone else occupy the property, and thus keep the insurance good.

The fact that A retained the right of possession until March 1 carries with it a probable reciprocal obligation to care for the property until that date, or until such time as the new owner can provide otherwise for its care. It is doubtful whether under the above statement of the contract A can be legally compelled to retain posses-

sion for the full time of his right of possession, but the Golden Rule, which is the best law ever written, would probably require A to see that the property shall be properly protected during the period contemplated in the contract.

DENATURED ALCOHOL BILL.

The free alcohol bill which passed the House of Representatives by the overwhelming majority of 224 to 7 and which has the unqualified endorsement of the President is now in a critical condition in the Senate. Senator Nelson W. Aldrich, of Rhode Island, chairman of the finance committee of the Senate, which has the bill in charge, has been driven to declare his position. Though there is no limit to this session of Congress except what it chooses to set, he says it is too late for any action by the Senate "based upon wise principles," and he finds it "necessary" to have extensive hearings on the bill on account of the "faulty work done in the House."

No person of intelligence can misunderstand the meaning of this position. The House bill is brief and a model of simplicity and directness. It has a single purpose and it provides for this with certainty. Everybody understands this and knows what it is for, and Senator Aldrich's attitude about "wise principles," "necessary hearings," and "faulty work in the House" means simply that he intends if possible to prevent action at this session.

Why is the Senator opposed to this bill? He is the father-in-law of John D. Rockefeller Jr., and joint grandpa with the elder, of the famous Rockefeller baby, and it is freely hinted around Washington that his personal interests make antagonism to free alcohol a prime necessity. There is no question that he will oppose to the last with all his might any consideration or action of this measure.

The issue is clear cut. There is no mistaking the situation. The question at issue is the liquid-fuel supply of this great country. The American farmer and the Standard Oil monopoly are face to face. The victory must be for one or the other. There can be no compromise.

Senator Nelson W. Aldrich with all the power of the Standard Oil behind him calmly ignores the well nigh universal public demand for immediate action and is determined to defeat the bill.

Farmers, there is only one thing to do. This great measure which means so much to you will be defeated unless you act at once—immediately. You can not reach Aldrich directly, but you can reach the Senators of your own State. Write to them at once, demanding a public statement of where they stand on this question, and demanding that they either compel action in the finance committee or take it out of committee and act upon it in committee of the whole.

There is no middle ground. Your Senators are with you in this matter or they are with the Standard Oil monopoly, and you must know at once which.

The free-seed graft by which members of Congress seek to buy the favorable consideration of certain of their farmer constituents by sending them at Government expense small consignments of common seeds amounts in the aggregate to an enormous raid on the Treasury. It is demoralizing, both to Congressmen and electors. It is a perversion of the useful original purpose of aiding in the introduction and distribution of new

varieties of cultivated plants. How any honorable man can support its continuance is hard to understand.

The reports indicate progress in consideration of the Interstate Commerce bill in the United States Senate. The bill would be passed readily if it could be brought to a vote, for few Senators would dare to go on record against a measure so universally demanded. But the opponents of that bill, using their power of delay under the rules of the Senate, are endeavoring to force concessions. Senator Long, of Kansas, is prominent among those who favor an effective and just measure.

The question of late potatoes has been settled to his own satisfaction by Friend W. H. Hinshaw, of Lyon County, who showed in THE KANSAS FARMER office last Friday some beautiful specimens of the Sir Walter Raleigh variety. They were firm and sound, and had shown no inclination to sprout. Friend Hinshaw plants them about May 20. They continue to grow until the vines are killed by frost, and may be dug at any time before the ground freezes too hard. They never acquire an earthy taste. The quality is first-class.

The report, just made, on the Standard Oil monopoly and its relations to transportation companies is apparently an able showing of information, carefully and efficiently gathered. Commissioner Garfield has in this investigation done much to overcome the bad impression which resulted from the bad blunders committed in the matter of the meat-trust investigations.

The coal-miners' strike in the Pennsylvania region promises to end quickly. The settlement is for three years on the basis of the recommendations made by the Roosevelt commissioners, on which the former strike was ended. Much suffering, much disorder, and much inconvenience to the public have been averted.

Special attention is directed to the article on "The Production and Care of Pure Milk," by Prof. Oscar Erf, of the dairy husbandry department of the Kansas Agricultural College. This is a timely article upon an important subject and is handled by a man of very wide experience.

Miscellany

Kansas Politics.

The great parties have held their State conventions in Kansas, and have named their candidates and declared their principles. The Democratic Convention was held first. Its nominations were published in last week's KANSAS FARMER. They are printed again in connection with the platform upon which they stand, so that both candidates and platform may be compared with those of the Republicans.

THE REPUBLICAN NOMINEES.

Governor—E. W. Hoch, Marion County.

Lieutenant Governor—W. J. Fitzgerald, Ford County.

Secretary of State—C. E. Denton, Harper County.

State Auditor—J. M. Nation, Neosho County.

Superintendent of Public Instruction—E. T. Fairchild, Ellsworth County.

Attorney General—Fred T. Jackson, Greenwood County.

State Treasurer—Mark Tully, Montgomery County.

State Superintendent of Insurance—Chas. Barnes, Osage County.

State Printer—T. A. McNeal, Shawnee County.

Railroad Commissioners—C. A. Ryker, Reno County; Geo. W. Kanavel, Harvey County; Frank Ryan, Leavenworth County.

Justices of the Supreme Court (for six-year term)—W. A. Johnston, Ottawa County; R. A. Burch, Saline County. (For four-year term)—Sils Porter, Wyandotte County; C. B. Graves, Lyon County.

THE REPUBLICAN PLATFORM.

The Republican party in State convention assembled reaffirms its pride in the history and achievements of the National organization and adherence to its principles. The wisdom of its financial policy so fiercely antagonized is now universally conceded, while its protective policy provokes controversy only between revisionists and stand-patters.

Under the magic of these wise policies, the country has vaulted to the

front rank among the nations in finance, manufactures, material development, and general prosperity, while its wage-earners find remuneration twice as great as under any other flag.

The vigorous, able, and wise administration of President Roosevelt commands our enthusiastic approval as it has won the plaudits of our countrymen, regardless of party.

We indorse the recent State administration and commend its splendid achievements to the favorable consideration of every patriotic citizen of the State.

The great calamity which befell San Francisco and its sister cities on the Pacific coast touched the ligature of sympathy which binds all humanity together, and we are proud that Kansas was among the first to respond to this patriotic call upon our common humanity, and that the response has been in harmony with the great heart and abundant resources of this State.

We believe that platform promises are as sacred as business contracts, and should be as faithfully fulfilled, and we point with pardonable pride to the redemption of the numerous promises made in our last State platform. Among the many wise enactments of the last Legislature we call especial attention to the adoption of an improved plan for the management of our State charitable institutions, the selection of a board devoting its whole time to the care of these sacred institutions, with ample headquarters in the State house, a plan which is resulting in an improved condition in all these institutions and a large saving of expenses; to the new State printing law, which within a year has resulted in the erection of a large three-story, fire-proof printing-house, with modern equipment, the cost of all of which has been saved in two years; to the juvenile-court law which is saving countless boys from prison brands; to the State depository law, from which the State is realizing more than \$1,000 per month upon its State deposits; to the fish and game law, which has placed Kansas beside the most advanced States in the protection of game and in the propagation of fish.

The Republican party enacted the first railroad law in Kansas. It has uniformly stood for consistent and efficient regulation of these public corporations. The last Legislature, without any specific platform-promise previously made, enacted a general railroad law, conceded to be the best in the United States. In addition it passed twelve other bills regulating the various relations of the railroads with their employes, passengers, and shippers, constituting altogether the most complete railway legislation ever enacted at a single session by the Legislature of any State. It pledges itself to such amendments and additions to these laws as experience shall justify and demand, to the end that the Board of Railroad Commissioners may become and be maintained an efficient tribunal for the enforcement of exact justice in matters relating to the transportation of passengers and freight.

The Legislature having conferred upon the Board of Railroad Commissioners full power to regulate freight and passenger rates, we pledge the nominees of this convention upon that board to a speedy and conscientious examination and determination of all these questions and the establishment of such maximum rates for passenger and freight traffic as shall be just to the people and the railroads, and we hereby place ourselves in harmony with the policy of President Roosevelt on railroad questions, which policy we heartily indorse.

We are in favor of the passage by Congress of the Hepburn railroad rate bill as it passed the House of Representatives, without amendment that will in any way impair its efficiency or diminish the powers granted by it to the interstate commerce commission.

We again declare our adherence to the principles of a protective tariff and earnestly favor its continuance by the levying of duties on imports to an amount sufficient to prevent ruinous competition with foreign manufacturers who employ cheap labor, but we do not believe that tariff schedules are sacred and we recognize that they should be readjusted from time to time in order to meet changed conditions.

We again express our undying gratitude to the men who fought to maintain the integrity of our Nation and Union and preserve to the world a Government founded upon liberty and equality, as well as to the men who, in later war, carried the flag of liberty to the oppressed of other lands and extended the boundaries of freedom.

We demand strict enforcement of all



BE SURE IT'S MADE IN SAGINAW

When your dealer shows you a low-down farm wagon ask him the question: "Is it made in Saginaw?" If it is—buy it, you can't make a mistake—you can't buy a better one—there's no other that is really as well made and serviceable as the

FARMERS HANDY WAGON

Made in Saginaw. All good things are imitated and that's why we lay so much stress on the point that you make sure it's made in Saginaw. We have made them for 13 years and made them so good we can't improve them now. We guarantee them for 5 years and they practically last a life time; in that time think of the saving in high lifting, draft, repairs, etc. Made with wood or steel wheels. Catalog free.

FARMERS HANDY WAGON CO., SAGINAW, MICH.

Branches, Kansas City and Des Moines. Also makers of Farmer's Hay and Stock Racks and All-Steel Frame Silos. Catalog free.

Wire Fence 29¢

48-in. stock fence per rod only. Best high carbon cold steel spring wire. Catalog, offences, tools and supplies FREE. Buy direct at wholesale. Write today.

MASON FENCE CO. Box 82, Leesburg, Ga.

Well Drills and Drillers' Supplies

The best on the market. Manufactured by THATCHER & SONS, Stillwater, Oklahoma. Write for circulars and prices.

WEED

Cutter for listed corn, adjustable long knives with harrow attachment, seat and draft rod all complete \$6. Free catalogue of snap bargains on many other goods. New Process Manufacturing Co., Lincoln, Kansas.

LAWN FENCE

Made of Steel. Lasts a lifetime. We have no agents. Sold to us at Wholesale Prices. 7cts a foot up. Cheaper than wood. Catalogue Free.

KITTELSON BROTHERS, Box 399, Muncie, Indiana.

\$10.00 Sweep Feed Grinder.

\$14.00 Galvanized Wind Mill.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

CEMENT FENCE POST or Building Blocks

WITH THE CROUCH \$10 MACHINE

Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.

Ellsworth Crouch, Oakland, Kansas

WELL

DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

THE 20TH CENTURY GRADER

Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks; Levels Land for Irrigation, Cuts Ditches, Cleanse Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled.

Descriptive Catalogue FREE.

THE WHITE CITY GRADER CO., Box F-7, WHITE CITY, KAN.

ADVANCE

The Continuous Stay

gives Advance Fence its superior strength. Our stay wire is never cut. Thus all the strength of the wire is retained for service. Fully half of it is wasted in cut stay fences.

Let us ship you what Fence, etc., you need. After 30 days if you don't like it, return it to us at our expense and get your money back.

We prepay freight and guarantee safe delivery. You take no risk.

Write today for our free fence book and freight paid factory prices.

Advance Fence Co., 3779 Old St., Peoria, Ill.

Modern Silage Methods

That is the title of our new 216 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO., Salem, Ohio.

Agriculture
Dwarf Milo Maize with African Sumac-Sorghum.

I should be glad to see you demonstrate and report as to the value of an experiment I happened to succeed well with last year and shall repeat again. It consists of planting Dwarf milo maize, one-third mixed in planter with two-thirds African sumac-sorghum. In this way I secured about half a crop of average maize, and just as much sorghum as if no maize had been planted with the cane. The heads of maize were double the average size of maize planted alone and stood up to perfection, while on adjoining land planted in maize only, the heads were small and stalks went down badly. The mixed fodder was better than either alone, and the maize and sorghum did not hybridize in the least. When the cane was 10 inches high the maize was 20 inches, and went on and matured very fine heads, and then the cane overtook and overtopped the maize and matured not in the least hindered or mixed with its brother maize, nor was there the least bother in harvesting on account of the mixture.

I do not think the mixture would hinder in my way of heading for seed. My plan is to take a low wagon with wagon-box on, place 4 by 6 lengthwise, one end resting on each endgate of bed, then fasten chopping block conveniently to scantling so block can be removed, when worn out by hacking of the broadaxe or chopping axe. When so prepared I drive in and straddle a corn row and a man on either side of the wagon holds the heads of one of these partially cured bundles on the block and I chop them off into the box, and the man carries the headless bundle to the rear of the wagon, and by the help of the second man starts a shock, and then hands up another from the ground just where the binder had kicked it off. When the wagon is full the three of us proceed to stack as the condition of the grain would indicate.

G. S. NUTTER.
Chaves County, New Mexico.

Your experiment in planting Dwarf milo maize and African sumac-sorghum together is an interesting one. I do not understand why you should secure so large a crop both of maize and sorghum when planted together, unless it be due to the fact that the maize stood up better where it was grown with the sorghum. I doubt whether this method of planting could be recommended for general use in this State, where both milo maize and sorghum succeed equally well.

I am pleased to receive your communication, and hope that you may report the results of further trial.

A. M. TENEYCK.

Cow-Peas Improve the Soil.

Please advise me which is best to sow on thin soil to cut for hay, cow-peas or soy-beans? Would it pay to sow either just before the last cultivation of corn, for fertilizing the land?

Neosho County. E. A. CRALL.

Cow-peas are superior to soy-beans as a forage crop, especially on thin land. At this station on upland soil cow-peas make a ranker growth and appear to be harder than soy-beans. We observe, also, that on land which has not previously been planted to soy-beans, the beans do not thrive well the first season or two, while cow-peas usually succeed fairly well at the first planting. This seems to be partly due to the fact that the bacteria which grow on the roots of the cow-peas are present in the soil, while the bacteria required for the soy-beans are apparently usually lacking. Before soy-beans succeed well it is necessary to inoculate the soil with the bacteria which grow on their roots.

We have been practicing the method of sowing cow-peas in the corn at the last cultivation during the past three seasons with fairly good success. When the season is dry the cow-peas usually make a thin stand and a dwarf growth, but in a favorably moist season a good crop of cow-peas may be grown in corn, planted as described above. Last fall after the corn was cut up on the plots, in which cow-peas were planted in the corn, the vines stood 12 to 15 inches high and covered the ground, and would have made a good crop of green manure, or the peas would have furnished considerable forage or pasture. We left the crop as a cover crop during the winter and will list to corn this spring. These experiments have not been conducted long enough to give definite results.

There is perhaps a tendency for the cow-peas to cause a little lighter crop of corn the year when the cow-peas are grown in the corn, especially when the season is dry, but there is little question that the soil may be improved by plowing under a green growth of peas, which should show its beneficial effect in the succeeding crops grown on such land.

At this station we prefer to sow cow-peas or some other green manuring crop in the grain stubble immediately after harvest, plowing down in the fall, for planting corn the succeeding season. Planted in wheat or oats stubble, the cow-peas usually make a good growth and there can certainly be no injurious effect from growing the crop on the land after the grain crop is removed, while by growing the crop with corn there may be a tendency, as suggested above, to decrease the growth of the corn. Cow-peas planted in wheat stubble last year made a good stand and stood about 15 inches high and were just coming into bloom when they were plowed under September 15.

Other crops which succeed well after wheat, making a good growth for green manuring, are rape, sorghum, and Kafir-corn. Cow-peas, however, should be superior to the others as a green manuring crop, since they actually add fertility to the soil above what is removed in the growing of the plants, due to the action of the bacteria which grow on the roots of the cow-peas, supplying the plants with nitrogen, which the bacteria take from the air. In my judgment there is no better annual crop adapted to Kansas conditions, which may be used in rotation or as a green manuring crop, than cow-peas. The only objection at present is the price of the seed. Every farmer should grow a small patch of cow-peas for seed. The peas may be grown much cheaper than they can be purchased. The New Era and Whippoorwill varieties are well adapted for growing in Kansas. A. M. TENEYCK.

The Seed-Bed.

With viable seed planted in the soil, a few simple factors largely determine the strength of germination, the stand and yield of the crop, and the quality of the grain produced. These factors are moisture, heat, and air. Every farmer knows that a dry seed will not germinate, no matter how favorable other conditions may be. Before the processes are begun, which start or renew life and produce growth, the seed must absorb moisture. Again, every seed requires a favorable degree of heat before it will germinate, and the presence of air is necessary in order to supply the "life-giving" oxygen. A seed placed in a vacuum with the proper degree of heat and moisture will not germinate, and the same results often occur when seeds are placed in a very wet or water-logged soil, because the air is largely excluded from a soil in such conditions.

In order to secure the ideal conditions for seed-germination and plant-growth a seed-bed for wheat should not be too deep and mellow, rather the soil should be mellow and not too finely pulverized, only about as deep as the seed is planted. Below the depth at which the seed is planted the soil should be firm (not too compact), making a good connection with the subsoil, so that the soil water may be drawn up into the surface soil. The firm soil below the seed, well connected with the subsoil, supplies moisture to the seed, while the mellow soil above the seed allows a sufficient circulation of air to supply oxygen, and favors the warming of the soil, gathering the heat of the sunshine during the day and acting as a blanket to conserve the soil heat, maintaining a more uniform temperature in the soil during the night. Meanwhile, also, the mellow soil conserves the soil moisture, acting as a mulch to keep the water from reaching the surface, where it would be rapidly lost by evaporation, and the same condition favors the growth of the young shoot upward into the air and sunshine, where in the presence of oxygen, light, and a favorable degree of heat, the green leaves quickly begin the work of assimilation and the soluble plant-food elements, absorbed by the roots, are rapidly transformed into protoplasm, starch, and the various tissues which build up plant structure, and the young plant grows and is soon firmly established upon its own roots.

With a deep, loose seed-bed the conditions are less favorable for seed germination than in the "ideal" seed-bed described. The mellow soil may be warm enough and well aerated, perhaps too well aerated, causing the soil to dry out, but with the deep, mellow seed-bed, the moisture in the subsoil

is not available for the use of the germinating seeds, because the capillary rise of the water is checked at the bottom of the mellow soil. Such a seed-bed is almost wholly dependent upon rain for sufficient moisture to germinate the seed and start the young plants, and even if such favorable weather conditions prevail at seeding time so that seeds may germinate and the crop start, yet at almost any time during the growing season if drought prevails, the crop growing in the deep, loose seed-bed is more apt to be injured because of the rapid drying out of the surface soil. In such seed-bed the crop is not only apt to "burn out" in summer, but it is also apt to "freeze out" in winter than a crop grown in the "ideal" seed-bed described above.

I can not go into a detailed discussion as to methods of preparing a suitable seed-bed. An excellent seed-bed for wheat may be prepared without plowing when wheat follows corn or other cultivated crops, which are removed from the field sufficiently early to prepare a seed-bed by disking and harrowing.

When plowing precedes the sowing by a short interval, it is well to follow the plow with the subsurface packer and harrow in order to pulverize and pack the soil at the bottom of the furrow and leave a mellow surface. This packing and pulverizing of the furrow slice is especially necessary when the soil is plowed dry or when stubble, trash, or manure is plowed under, because if the furrow slice is left loose and unpulverized, the capillary connection of the soil with the subsoil is largely broken off and the water will not rise into the surface soil to supply the germinating seeds and feed the roots of the young plants, hence, the seed fails to germinate well, the stand is often poor, and in such a seed-bed the crop "freezes out" during the winter or "burns out" during the succeeding summer.

The general experience of farmers and the results of experiments are much in favor of early plowing for wheat. At the Kansas Fort Hays Branch Station, trials carried on for the last two seasons gave an average yield of 11.6 bushels per acre for early plowing, August 1 to August 15; 5.4 bushels per acre for medium plowing, September 1 to September 30; and only 2.1 bushels per acre for late plowing and late sowing, October 15 to October 30. The experiments at the above-named station also greatly favor plowing for wheat rather than disk and sowing in the stubble. As an average for three seasons, land which was plowed, packed, and harrowed gave an average yield of 11.3 bushels per acre, while disked stubble land yielded 6.7 bushels per acre. It pays to prepare a seed-bed well. A. M. TENEYCK, Professor of Agriculture, Kansas State Agricultural College, Manhattan, Kans.

Saving and Handling Manure.

There is no more wanton waste on the farm than the too common waste of barnyard manure. The common practice of throwing the manure from the stables out under the eaves of the barn and leaving it for a long interval in the yards exposed to the leaching of rains or to decomposition by drying and heating results in a great loss of plant-food elements. An experiment in determining the loss of manure by exposure was carried on at the Cornell Experiment Station, in 1890, as reported in Roberts' "Fertility of the Land." In this experiment horse manure, in a loose pile, valued at the beginning at \$2.30 per ton, lost 42.6 per cent in value. Cow manure, valued at \$2.29 per ton, lost 30 per cent in value. In another experiment a ton of fresh manure, valued at \$2.30, lost 42 per cent in value by暴露 of six months in the open yard. In comparison with this, manure which had been kept in a covered yard in 1883-84, being the entire product of the stock for that year, when analyzed was found to be richer in nitrogen, phosphoric acid, and potash than fresh manure, and was valued at \$3.61 per ton.

Probably the most economical way to handle manure when stock is kept in stables is to haul directly from the stables to the field, spreading the manure at once, preferably on grass or alfalfa land, although the manure may be hauled onto any land which is in condition to receive it. It may not be practicable to recommend the use of covered barnyards in the West, but it is practicable to furnish abundant shelter room for sheltering stock during the winter-feeding season. It is also essential in order to save the manure, especially the liquid manure, to give a liberal supply of bedding for the stock.

WAGON SENSE
Don't break your back and kill your horses with a high wheel wagon. For comfort's sake get an
Electric Handy Wagon.
It will save you time and money. A set of Electric Steel Wheels will make your old wagon new at small cost. Write for catalogue. It is free.
ELECTRIC WHEEL CO., Box 46, Quincy, Ill.

SCALES ALL STYLES LOWEST PRICES
PITLESS
30 DAYS FREE TRIAL
FREE CATALOGUE
AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

Buy SPLIT HICKORY
25% MORE VALUE
30 Days Free Trial
2 Year Guarantee
Write and tell us what style vehicle you want. 1906 Catalog, 180 pages, now ready.
THE OHIO CARRIAGE MF'G CO., Station 261
H. C. Phelps, Pres.
Cincinnati, O.
\$41

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor,

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)
Chicago, Ill.

Have baled about 250 tons of alfalfa with the press and find that it does first-class work in every respect. The self feeder makes it entirely safe to work with. Chas. Cook, Las Animas, Colo.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN HAY PRESS CO., 1084 Jefferson St., Topeka, Kansas

Send for 84 Page Catalog

Buggies
\$28.00
Harness
\$5.60

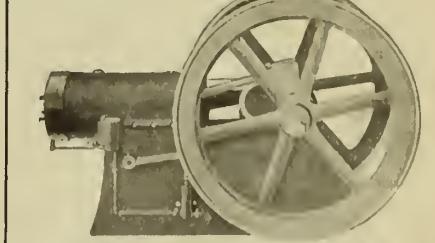
Erhardt Carriage and Harness Co., Atchison, Kansas

The Waterloo Gasoline Engine

A popular engine at the right price.

Also Power and Sweep Feed Grinders

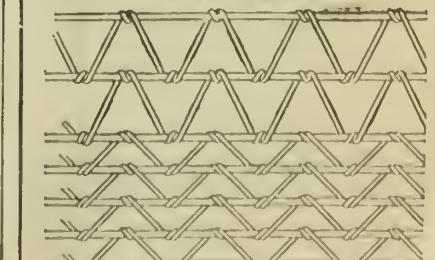
Write for illustrated catalog.



WATERLOO GASOLINE ENGINE CO.
1014 Cedar St., Waterloo, Iowa.

THE FIRST

Hartman Stockade Woven Wire Fence



Ever built was erected 17 years ago and is still in use as durable and strong as when first put up. The Hartman is a perfectly woven wire fence that is strong enough to keep in the maddest bull and fine enough to keep out the chickens. It is made of the best quality galvanized steel wire and contains much more material than fences more cheaply constructed. That's why it lasts so long. If your dealer doesn't handle it, write for catalogue and prices. Address

GLEN MFG. CO., 145 Main St., Ellwood City, Pa.
Also Mfrs. Hartman Steel Picket Fence, Hartman Flexible Wire Mats and Grea Steel Mat.

Usually, farmers in the West have plenty of straw and roughage which may be profitably used for bedding in the stables, sheds, and yards. The barnyard should be well drained; however, there is apt to be a great loss of the soluble elements of plant-food where the drainage water is allowed to run away through natural drainage channels. If possible, such drainage should be turned over grass meadows or pastures, in order that the most available part of the plant-food in manure may not be entirely lost. It is not possible to haul manure daily from the yards and sheds, but the farmer should have a regular time for hauling out the manure and cleaning up the yards; preferably, this work should be done two or three times during the year in order not to allow too great an accumulation and the waste which is sure to take place by decomposition and leaching.

The advantage of spreading manure with the manure-spreader is that the manure can be more evenly and thinly distributed. It is better to spread manure rather thinly over a large area of land than to spread it thickly over a small area. By heavy application there will be not only a waste of manure, but when a heavy coat of manure is plowed under it is apt to injure the crop by "burning out" in a dry season. When the manure can be handled daily or can be hauled from the stables as made and spread on meadow or pasture land, it is very handy and almost necessary to use a manure-spreader. The use of the manure-spreader is not so practical, however, when the manure is hauled out only once or twice a year, as is the common practice. It is usual in such a case to turn all hands and teams to the work of hauling manure, thus making it impracticable to use a single spreader, and several manure-spreaders could not be profitably owned and operated except on very large farms. It would be possible, however, for farmers in a neighborhood, by exchanging work, to cooperate in the hauling of manure, when several manure-spreaders might be economically owned and operated in a single neighborhood.—A. M. TenEyck, in *The Industrialist*.

Pasture Grasses for Wet Land.

Kindly advise me what kind of grass I should sow for hog pasture. I have five acres of wet land of which I wish to make hog pasture. How many hogs would five acres of grass support along with a little other feed?

HENRY L. VERNON.
Jackson County, Arkansas.

In your section of the country on the land which you describe, the following is a good combination of grasses to sow for hog pasture—English blue-grass 12 pounds, timothy 6 pounds, and Alsike clover 3 pounds per acre. If your purpose is to continue the land in permanent pasture, a little Kentucky blue-grass and white clover might be included with the above-named grasses and clover. Sow 8 to 10 pounds of good Kentucky blue-grass and a pound of white clover with the amount of seed of each of the grasses named above. Kentucky blue-grass and white clover start slowly and will not furnish much pasture for a year or two, but gradually the other grasses will become less productive, and the blue-grass and white clover will spread and take the place of the less permanent grasses. However, if the land may be rotated and planted with other crops, it would be well to break up the pasture every four to six years, planting it for a year or so to corn and then reseeding, since the combination of grasses with Alsike clover will give a greater abundance of pasture than is likely to be secured from Kentucky blue-grass and white clover. With this field well set with grasses and clover, it should furnish pasture for twenty-five to thirty hogs.

It will be advisable for you to write to your State Experiment Station, at Fayetteville, asking for further information along this line.

A. M. TENEYCK.

Millet for Hay.

Kindly advise when to sow millet for the production of hay. Is millet hay good feed for horses? I wish to sow about 3 acres. Is millet hay better than cane for horses? How much millet-seed should be sown per acre?

Franklin County. W. H. B.

It is usual to sow millet rather late in the spring. At this station we sow millet soon after planting corn, about the middle to the last of May, although it is practicable to sow earlier or later if it suits the convenience of the farmer. I have observed, however, that the earlier-sown millet does not make so good a growth as that sown later, and

also the early-sown millet is apt to be weedy, and often makes a poor stand. Again, millet sown late in the season when the weather has become hot does not usually make much growth, although certain varieties may be sown later than other varieties. I have observed at this station that the common fox-tail millets, such as the Siberian, German, and Hungarian varieties, do best when sown rather early in the season, while the broomcorn or hog-millets usually make a better crop when sown as late as the middle of June.

Millet hay is not considered a good feed for horses. The hay seems to act unfavorably on the kidneys, causing ill health, and horses fed exclusively on millet become stiffened in the joints, and some animals have died from the effects of eating the hay. For bulletins discussing the feeding of millet hay to horses I refer you to the North Dakota Experiment Station, Fargo, N. Dak. Millet hay is better feed for cattle than for horses. Cane will probably make a better roughage for horses than millet, although I would advise not to feed cane exclusively. Perhaps Kafir-corn fodder is preferable to cane fodder, or a combination of cane and Kafir-corn makes good roughage for horses or other stock.

It is usual to sow about 2 to 3 pecks of millet-seed per acre. If cane or Kafir-corn is sown broadcast, sow about a bushel of each separately or half a bushel of each in combination.

A. M. TENEYCK.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.
No young animal is profitable that is not growing steadily.

With horses, comfort in the stable means service in the field.

Get all of the manure hauled before cultivation begins.

While hogs should have plenty of water, it should be pure and fresh.

The putting in and culture of the crops has much to do with productivity.

The management and care of the stock of the farm will decide to a great extent its profitability.

Horses need a change in rations, according to the kind and amount of work they are required to do.

The weeds should be just as carefully kept from occupying the ground when the ground is vacant as when occupied with a crop.

Too much time can not well be spent in making improvements on the farm, when the improvements increase the productiveness and value of the land.

In order to obtain the full value for the wool it must be sent to the market in the best condition possible.

The stability of any industry depends to a great extent on its profitability, and its profitability, as a rule, depends on its management.

There is no work required of any horse, let the duty be ever so menial, where intelligence, honesty, and kindness will not be of material value.

Never sell the yearlings and younger stock while there are older animals that can be disposed of with equal advantage and which will not grow into more money.

A kind disposition is a very important quality in a horse, and should be looked after very carefully in selecting one for practical use.

Charcoal given to animals, especially to poultry and swine, acts upon the blood as a purifier, often being found of benefit when there is no definable disease.

The best horse is the one with a kind and tractable disposition, well broken and above all the one that is the most serviceable.

Feeding, location, and judicious selection of parents on both sides are powerful factors in producing good stock of all descriptions.

Always select smooth and growthy animals to feed, even at greater cost, and the profit will certainly be in proportion to the good judgment exercised in making this selection.

With all crops the early cultivation is the most important, and in nearly all cases the sooner the cultivation is commenced after the crop is planted, the better.

It is not wise to attempt to graze too much stock on a given number of acres nor to plow and crop more than can be kept in the highest state of fertility by suitable fertilization.

Keep up with the work as fully as possible. With all crops the best results are possible only when the necessary work is done in given season. Better hire a little extra help than to get behind.

SAVE HALF THE TIME

Half the Work

The farmer who is looking for machines that will do his work in less time—that will increase his working force one-half by enabling him to do the same work in half the time, cannot afford to overlook the time-saving features and up-to-date improvements embodied in the

Do Better Work

"St. Joe" Double Row Disc Cultivator

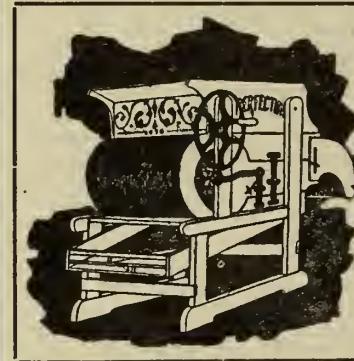
This improved cultivator is equipped with our new patent **Seat Board**, which runs on Rollers and will adjust itself much easier than any other seat board—a vital point in its favor. **Four Levers** make this machine handy to operate—always under complete and perfect control. **Four Coil Springs** are used—two to assist operator in raising Discs, two to cushion the Shovels

when striking obstructions. **Adjustment** is simple and easy—suit the work—we describe how this is accomplished in our free circular which the farmer can have simply by asking for it. Tells of more good cultivator features than any other machine on the market has. Write for the circular to-day and see how this machine saves you time and money.

ST. JOSEPH PLOW CO.,
Box 12 St. Joseph, Mo.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. ¶ Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: :



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

THE JAYHAWK STACKERS AND RAKES



Have been proven the best by test.

No loose spots to settle, take water and spoil.

It saves 50 per cent of the labor on the stack.

It can place hay in any spot on a rick of any length.

It builds a rick 20 feet high.

It is valuable in retopping.

No troublesome pulleys.

No stakes to drive.

No trouble with winds.

No time lost moving.

No upsetting.

No bother with long ropes.

It is a good wagon loader. It has only 18 foot of rope. Team only travels twice as far as the load is raised. The load can be carried and dumped at any point of elevation. It is a great labor saver.

We also manufacture two patterns of

Sweep Rakes

We Ship Responsible Parties on Trial

Give us a chance to do so by letting us know your wants.

YOURS FOR A SQUARE DEAL

The F. Wyatt Mfg. Co., Salina, Kas.

Mention Kansas Farmer.



All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

Kansas City Hay Press Company,
129 Mill Street, Kansas City, Missouri.



Thirty-One Styles of Farm Fencing
Sold direct to consumers on thirty days trial
at wholesale prices. Catalogue free.

THE FARMERS' FENCE CO.
Melvern, Kansas.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

May 17, 1906—Great sale of all beef breeds of cattle at Wichita Kans. D. R. Mills, Des Moines, Ia., Manager.

May 15, 1906—Combination sale of Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.

May 17, 1906—Combination sale of Aberdeen-Angus, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.

May 29-June 1, 1906—Sale of all beef breeds, Kansas City sale pavilion, D. R. Mills, Mgr., Springfield, Ill.

June 7, 1906—F. M. Marshall, Blackwater, Mo.

June 14-19, 1906—Sale of all beef breeds at Sioux Falls, S. D., D. R. Mills, Mgr., Des Moines, Iowa.

June 19-20-21, 1906—Dispersion of Tebo Lawn Shorthorns, E. B. Mitchel, manager, Clinton, Mo., at Kansas City.

June 28-29, 1906—Sale of all beef breeds at Des Moines, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.

October 2-3-4-5, 1906—Glasco Live Stock Association sale of pure-bred stock, Glasco, Kans.

October 10, 1906—H. L. Faulkner, Jamesport, Mo.

October 17, 1906—W. A. Honeyman, Madison, Kans.

October 17, 1906—Poland-Chinas, W. A. Pruitt, Ashville, Kans.

October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.

October 20, 1906—W. R. Dowling, Norcatur, Kans.

October 23-24, 1906—E. A. Eagle & Sons, Agricola, Kans.

October 24, 1906—Poland-Chinas, Frank A. Dawley Waldo, Kans.

October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.

November 1, 1906—Frank Zimmerman, Centerville, Kans.

November 6, 7, 8, 1906—Sale of all beef breeds, Kansas City Sale Pavilion, R. A. Ford, Lawson, Mo., Manager.

November 8, 1906—T. P. Sheehy, Hume, Mo.

November 13, 1906—Howard Reed, Frankfort, Kans.

November 16, 1906—G. M. Heberd, Peck, Kans.

November 20-23, 1906—Blue Ribbon sale of all beef breeds, D. R. Mills, Mgr., Des Moines, Iowa.

November 27, 1906—L. C. Caldwell, Moran, Kans., December 4, 1906—Poland-Chinas, Lemon Ford, Minneapolis, Kans.

December 11-12, 1906—James A. Funkhouser and Charles W. Armour, sale pavilion, Kansas City.

Improved Stock Breeders Association of the Wheat Belt—November 13, 14, 15, 1906, at Arkansas City, Kans., I. E. Knox, Nardin, O. T., manager; Dec. 5, 6, 7, 1906, at Anthony, Kans., Chas. M. Johnston, Caldwell, Kans., manager; Dec. 18, 19, 1906, at Wichita, Kans., J. C. Larimer, Derby, Kans., manager; Feb. 13, 14, 15, 1907, at Caldwell, Kans., Chas. M. Johnston, Caldwell, Kans., manager.

Swine-Feeding Tests.—Armour's Deodorized Meat-Meal and Alfalfa Hay as Supplementary Feeds to Corn.

The animal husbandry department, Experiment Station, Kansas State Agricultural College, reports in Press Bulletin No. 149 as follows:

Numerous questions are being received at the Kansas Experiment Station as to the value of the various packing-house by-products recommended for swine-feeding in connection with corn, and during the winter of 1905-'06 an experiment was carried on to secure more data on the subject. The value of alfalfa hay as a means of

Lot II, corn-meal five-sixths, and Armour's deodorized meat-meal, one-sixth. Lot III, corn-meal and all the alfalfa hay they would consume.

A feed-rack was used for the alfalfa hay similar to a sheep-rack without legs. This method kept alfalfa hay before them at all times without waste. The hay was fed uncut.

The value received per bushel for corn marketed via the pork route is an excellent method of calculating the profit from feeding. In the case of Lot I, figuring the cost of the pigs at the beginning of the experiment at 4 cents per pound, we have the difference between \$51.60 and \$123.54, or \$71.94, to credit to the 13.73 bushels of corn which each pig consumed, returning a value of 52 cents per bushel for the corn. With Lot II, after deducting from the \$169.72 received for the hogs at the market, the cost at 4 cents, or \$51, and the cost of the meat-meal fed, we have \$87.68 to credit to the 14 bushels of corn which each pig consumed, or a value of 62½ cents per bushel. With lot III we have left \$77.32 to credit it to the 14.06 bushels of corn consumed per pig, after deducting \$52.40, the original cost of the ten pigs, and \$5.36, the cost of the hay consumed. This gives a value of 55 cents per bushel for the corn fed. This shows that 20 per cent is added to the value of corn by feeding meat-meal at \$2 per cwt. as a supplementary feed, and 5.8 per cent added to the value of the corn by alfalfa hay at \$8 per ton.

These hogs were shipped direct to the Chas. Wolff packing-house, Topeka, Kans., and slaughter tests were obtained of the different lots. The Government inspector, Dr. De Wolf, pronounced the whole bunch as unusually healthy. The lymphatic glands were large and soft, and only one case of parasitic infection of the liver was found. All had more leaf-lard than the average hog sold on the market. The amounts for the different lots were as follows: Lot I, 90 pounds; lot II, 94 pounds; lot III, 90 pounds. Although lot II seemed much fatter and heavier on foot, the leaf-lard was but slightly greater. The superintendent of the packing-house, J. B. Nicholson, stated that the flesh of lot II seemed firmer than the others in the warm condition. The hogs receiving alfalfa hay showed very fine carcasses.

The results of this experiment serve to emphasize the importance of converting the raw material of the farm into a more finished product in order to secure higher prices on the market, and also to retain a much higher per cent

TABLE I—WEIGHTS AND GAINS.

No. of Lot.	No. of pigs	Days fed	Weight Oct. 9, '05	Weight Jan. 29, '06	Total gain lbs	Av. daily gain per head, lbs
I.	10	112	1,290	2,400	1,110	0.99
II.	10	112	1,275	3,250	1,975	1.76
III.	10	112	1,310	2,630	1,320	1.18

TABLE II—FINANCIAL STATEMENT.

Number of Lot	Weight beginning cwt.	Value at \$4 per market cwt.	Wt. on Topeka lbs.	Selling price per cwt.	Proceeds	Av. expencs per lot	Total cost per lot	Net profit per hog
I.	1,290	\$51.60	2,320	\$5.32 1/2	\$123.54	\$3.50	\$103.16	\$20.4
II.	1,275	51.00	3,143	5.40	169.72	3.50	134.59	35.1
III.	1,310	52.40	2,525	5.35	135.08	3.50	110.48	24.6

TABLE III—FEED COST AND COST OF GAINS.

No. of lot.	Kind of feed.	Pounds fed.	Value of feed consumed	Cost of feed per cwt.	Pounds of gain per 100 lbs.
I.	Corn-meal	7,690	\$0.62 1/2	\$48.06	\$4.33
II.	{ Corn-meal	7,848	62 1/2	49.05	{ 397.3
	Meat-meal	1,552	2.00	31.04	{ 78.5
Total.			\$80.09		
III.	{ Corn-meal	7,875	62 1/2	\$49.22	{ 596.5
	Alfalfa hay	1,340	.40	5.36	{ 101.5
Total.			\$54.58		

Increasing the value of corn in pork production was also made the subject of one test in this experiment. Its value for growing swine and breeding stock has been recognized for some time, but its value in the fattening pen is still a subject of inquiry. Thirty strong, thrifty shoats were available for this experiment, and they were divided as equally as possible into three lots of ten pigs each. The pigs were all cross-bred, and in the division an equal number of each particular cross were placed in each of the three lots as follows: Three Berkshire X Yorkshire pigs, three Berkshire X Tamworth pigs, two Poland-China X Berkshire pigs, and two Poland China X Duroc-Jersey pigs. The average weights of these three lots on October 9, 1905, when the experiment began, were as follows:

Lot I, 129 pounds; lot II, 127.5 pounds; and lot III, 131 pounds.

The rations were as follows:

Lot I, corn-meal.

THE KANSAS FARMER

The best hand tool a farmer can use is a Keen Kutter tool. A Keen Kutter hoe, fork, shovel, or scythe will do more hoeing, pitching, shoveling, or mowing than any other similar tool—because it is better adapted to its work and stands more hard wear. Farmers accomplish more, and make more when they use

KEEN KUTTER TOOLS

Hoes, Forks, Scythes, Shovels, Manure-hooks, Rakes, Grass-shears—all Garden Tools and a complete line of Carpenter Tools—are each of the very highest quality.

All working or cutting parts are forged from best crucible steel, and oil tempered to give elasticity and long wear. This careful manufacture makes Keen Kutter tools long-lived—they last twice as long as common tools. Each Keen Kutter Tool is finely finished, and properly hung or adjusted for best and easiest work.

Ask your dealer to show you tools bearing the Keen Kutter trade mark. If he does not have them write us.

Tool Book Free.

"The Recollection of Quality Remains Long After the Price is Forgotten."

Trade Mark Registered.

SIMMONS HARDWARE COMPANY,
St. Louis and New York,
U. S. A.



BLACKLEGIDS



THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill.

Just a little pill to be placed under the skin by a single thrust of the instrument.

An injector free with a purchase of 100 vaccinations.

For sale by all druggists. Literature free—Write for it.

PARKE, DAVIS & COMPANY.

DETROIT, MICHIGAN, U. S. A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

Save Money on Oil

We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

Our Premium Machine Oil is sold at \$3.50 per barrel. Thousands are using it and find it all right.

Every barrel guaranteed, and you be the judge. Other oil costs 35c to 40c per gal.; ours costs \$3.50 per barrel. Freight rate is 32c per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2c.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

\$31,500,000.00 at Risks

30,000 Members

The Farmer's Alliance Insurance Company of McPherson, Kansas

We furnish insurance at cost; 13 years of successful business. Why carry your insurance with others when you can get it in this company at much less cost? Write for full particulars of our plan.

C. F. Mingenback, Sec., McPherson, Kansas

Destroy the Gophers

In Your Alfalfa Fields by Using

Saunders' Gopher Exterminator

It is a machine which forces a deadly gas through their runways and is warranted to kill gophers within 100 feet of operation. With it a man can clear from five to six acres of gopher-infested land in a day at a cost of twenty cents per acre. The poison we use can be gotten at any drug store. Satisfaction guaranteed or money refunded. Complete outfit for \$5.

Flint Saunders, Lincoln, Kansas

Mention The Kansas Farmer.

**When you buy
WET WEATHER CLOTHING
you want complete protection and long service.
These and many other good points are combined in
TOWER'S FISH BRAND OILED CLOTHING
You can't afford to buy any other**

A.J. TOWER CO., BOSTON U.S.A.
TOWER CANADA CO. LTD.
TORONTO, CAN.

No More Blind Horses For Specific Ophthalmia, Moon Blindness and other Sore Eyes, BARRY Co., Iowa City, Ia., have a cure

STOLL'S STAY-THERE EAR MARK.
The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send or samples. H. C. Stoll, Boston, Mass.

A Humane Society in a Bottle

KENDALL'S SPAVIN CURE

Nothing affords such relief for Curbs, Splints, Ringbones, Spavins and Lameness as
Kendall's Spavin Cure.

Whitford, N. H., June 28, 1905.
Gentlemen—I have used Kendall's Spavin Cure on Spavins, Ringbones, Sweeney, Galls and Sores, and it has cured them all. Very truly yours, S. M. Clark.

Price \$1; \$6 for 36. Greatest known liniment for family use. All druggists. Accept no substitute. The great book, "Treatise on the Horse," free from druggists or
Dr. B. J. Kendall Co., Enosburg Falls, Vt.

SECURITY GALL CURE
POSITIVELY CURES
SORE SHOULDER
SORE NECKS OR BACKS ON
HORSES AND MULES
IT CURES THEM ANYWAY.
IF NOT SOLD IN YOUR TOWN WE WILL SEND YOU
FREE SAMPLE, if you send us the name of your dealer.
Put up in 25c, 50c and \$1.00 cans
MONEY BACK IF IT FAILS
SECURITY REMEDY CO.
MINNEAPOLIS, MINN.

THE HAPPY HOG AT DIPPING TIME

Is happy because he is being FREED from LICE that torture and torment. August, October are best months to dip hogs kill lice. Dipolese, Hog Dip works quickly and thoroughly. It KILLS HOG LICE, destroys all disease germs, prevents HOG CHOLERA, saves loss, keeps your hogs healthy and growing. Every hog-raiser needs it. Dipolese is easy to use; the cheapest hog insurance you can buy. Write for booklet and enough dip to make a gallon, FREE.

MARSHALL OIL CO., Box 13, Marshalltown, Iowa.

CAR-SUL

The Disinfectant Dip That Is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other live-stock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Manufacturers of Shipping Trade, 1501-03 Beale St., Kansas City, Mo.

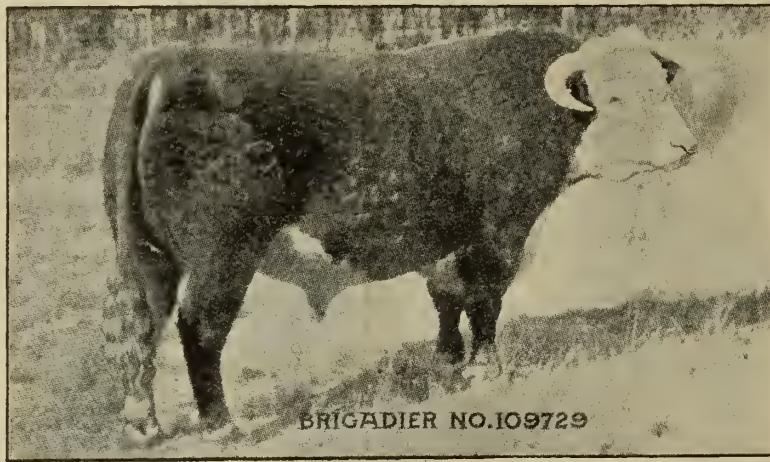
fering, and Mr. Rockefeller writes that that are all very fine individuals. This is the second time Mr. Mills has sold for Mr. Rockefeller, as is also the case with Mr. W. S. Swinney, Bois d'Arc, Mo., who is sending a car-load of very fancy young bulls and heifers by the famous American Royal first prize winner, Brigadier 109729, a double Anxiety 4th sire, frequently shown, but never defeated, and unquestionably the greatest son of Gudgel & Simpson's Lamplighter, now living. A car-load of steers by Brigadier recently topped the Kansas City market, selling for the highest price since Christmas. This fact should prove an incentive for farmers, breeders, and ranchmen to take advantage of this opportunity to secure a young Brigadier and go and do likewise. Mr. Swinney's consignment also includes some choice ones by the prize-winning Dale Jr. 157199, the best son of the \$10,000 Champion Dale.

Mr. Swinney writes, "Our consignment will be fully as good or better than the ones we had in your February Kansas City sale," and all who saw them there will remember that they were beautifully conditioned and a most uniform lot. Continuing, Mr. Swinney states that Lot 4, Emanuel, is as good a 2-year-old as the one Mr. Crawford paid \$300 for in your Kansas City sale, and Lot 5, Clover Leaf Beau, is a better one than sold in that sale. We wish to emphasize the fact that few if any better consignments than this one have been seen in any sale this season.

S. L. Standish, Hume, Mo., is also a frequent contributor to Manager Mills' sales, and he never leads an animal in

mate. Countess Victoria 2d, brought \$405, going to Jas. Duffus, Malcom, Ia. The choice of the bulls went to Delmer McCann, Kennard, N.C. The following is a list of the sales over one hundred dollars with this summary:

24 cows and heifers brought	\$5,040.00
Average	210.00
12 bulls sold for	1,575.00
Average	131.00
36 head brought	6,615.00
Average	183.75
Lady Missie 3d, 1 yr.; Thomas Andrews, Cambridge, Neb.	\$425
Countess Victoria 2d, 10 mos.; Jas. Duffus, Malcom, Ia.	405
Sarepta Duke 238508, 3 yrs.; A. Burton, Bertrand, Neb.	155
Bartmpton Lady 2d, Karl Dietsch, Shelby, Neb.	225
Nonpareil Lady; C. R. Steele, Ireton, Ia.	245
Bartmpton Duke; J. A. Cavers, South Omaha.	115
Bartmpton Duke 2d; Geo. E. Feary, Seward, Neb.	155
Butterfly Lady 2d; L. C. Reece, Prescott, Ia.	375
Butterfly Duke 2d; Delmer McCann, Kennard, Neb.	300
Ensign; Fred Barnes, Albion, Neb.	145
Matchless Lady; John Buckstead, Whitehead, S. D.	265
Acanthus Lady; H. H. Hess & Son, Surprise, Neb.	215
Lucky Boy; J. A. Cavers.	100
Nonpareil Lady 2d; H. H. Hess & Son.	235
Nonpareil Lady 3d; J. M. Duffus.	180
Allen's Sarepta 4th; H. F. Brown, Minneapolis, Minn.	260
Allen's Sarepta 5th; J. M. Hill, La Fontaine, Kans.	200
Acanthus Duke 252003; J. A. Cavers	130



WICHITA SALE, MAY 17, A CARLOAD OF BRIGADIERS ARE INCLUDED.

At the great Wichita, Kans., sale next Thursday, May 17, one of the attractions will be a carload of the get of the first-prize double Anxiety 4th Brigadier 109727. This great show and breeding bull was a first prize winner at the Royal, and although frequently shown, has never been defeated. A carload of steers by Brigadier recently topped the Kansas City market, selling for the highest price since Christmas. He is owned by Mr. W. G. Swinney, Bois d'Arc, Mo. Other Hereford consignors are Frank Rockefeller, Belvidere, Kans.; S. L. Standish, Hume, Mo., owner of Onward 4th; G. L. Rinehart, Hunnewell, Kans.; H. Monroe, Lyons, Kans.; N. Molzen, Newton, Kans.; Klaus Bros., Bendena, Kans.; and others. A grand array of Shorthorns will also be auctioned the same day, and the sale will take place in G. O. Morgan's Riverside Barn, West Douglas Ave. Catalogues ready. Address D. R. Mills, Sale Manager, Des Moines, Iowa.

the ring that is not strictly high-class in every particular. Some of the superb young heifers in his consignment are safe with calf to Onward 4th, champion bull at the Royal and many fairs during 1903-4, for which bull Mr. Standish paid a long price. Other gilt-edged heifers in this consignment are bred to Beau Ideal, who stood so high up in the show-rings of the Royal and other places. Mr. Standish also includes two splendid bulls by Columbus 47th, that are hard to beat.

W. H. Rhodes, Tampa, Kans., sends a very select consignment, by his show and breeding bull, Keep On 4th, winner at the International and Royal shows, and many State and county fairs.

Mr. G. L. Rinehart, Hunnewell, Kans.; Mr. N. Molzen, Newton, Kans.; and Mr. H. Monroe, Lyons, Kans., list a most attractive lot, and one thing sure is the fact that buyers at this great sale will positively not be disappointed in the exceptional quality and breeding of the cattle listed, and there will be no trouble to fill out carlots from the large variety catalogued. A postal card to D. R. Mills, sale manager, Des Moines, Iowa, will bring you an illustrated catalogue, and no admirer of the breed can afford to remain away from this most important event in sale circles. Seventy-five head of both breeds are listed, and the sale will begin at 10 a.m.

A Successful Sale of Scotch Shorthorns.

The sale of pure-bred Scotch Shorthorns by Geo. Allen, of Lexington, Neb., at South Omaha, Neb., May 1, was a complete success, so far as the cows are concerned, but the prices paid for most of the bulls were unsatisfactory. There was a good attendance of representative breeders, both veteran and beginners, from Nebraska, Kansas, Iowa, Missouri, the Dakotas, and Minnesota, and bidding was very spirited on the females. The yearling heifer, Lady Missie 3d, topped the sale at \$425, and was taken by Uncle Tom Andrews, of Cambridge, Neb., and her roan

SCREW WORMS IN CATTLE.

In most of the Southwestern states screw-worms cause severe losses, as cattlemen well know. Prof. Wilson, of the Arizona Agricultural College, writes us, regarding his experience with Zenoleum and says that they have used it very successfully in combating the screw-worms, also for treating sheep for catarrh, as well as for disinfesting the yards and barns and suggests that the station will never be without a plentiful supply for any emergency. This coal-tar preparation is made by Zenner Disinfectant Company, 61 Lafayette Ave., Detroit, Mich. In small lots, the price is \$1.50 per gallon, express paid, but lower quotations are made on larger quantities.

Dawson 252005; J. A. Cavers..... 130
Village Boy; F. M. Terrill, Lincoln, Neb..... 125
Walnut Grand Duchess; I. S. White, Rock Bluff, Neb..... 115
Village Princess 2d; H. M. Hill..... 220
Acanthus Lady 3d; I. S. White..... 125
Matchless Lady 3d; Karl Dietsch..... 150
Lady Lavender 4th; C. R. Steele..... 275
Acomb Lady 4th; C. R. Steele..... 135
Village Princess 3d; George White, Emerson, Ia..... 125
Allen's Sarepta 5th; H. F. Brown..... 150
Butterfly Lady 4th; I. W. Chappell, Kearny, Neb..... 125
Lady Lavender 6th; M. L. Andrews..... 140
Nonpareil Lady 5th; A. C. Shellenberger, Alma, Neb..... 160
Lady Lavender 7th; A. C. Shellenberger..... 200

Last Call—Wichita Shorthorn Sale, Next Thursday, May 17.

Next Thursday, May 17, at Wichita, Kans., a very high-class lot of Shorthorns will go under the auctioneer's hammer at G. O. Morgan's Riverside Barn, West Douglas Ave., beginning at 10 a.m., and every admirer of the breed should send at once to D. R. Mills, sale manager, Des Moines, Iowa, for catalogue, now ready. The consignors are Henry Stunkel, Peck, Kans.; R. W. Swain and Henry Burling, Caldwell, Kans.; F. H. Foster, Lyons, Kans.; M. D. Crittenden, South Haven, Kans.; D. M. Howard, Rossville, Kans.; Locust Grove Farm, Nardin, Okla.; Grimes Bros., Montrose, Iowa; D. Donohue, Appleton City, Mo.; and others. This sale will present possibly the last and greatest opportunity of the season to secure high-class bulls and herd-headers. Mr. Stunkel writes of the carload of young bulls he is sending, by his richly bred Cruickshank Butterfly sire, Victor Orange 190218, one of the best show and breeding bulls in the United States: "This is the best lot of bulls I ever raised, and in fact it would be difficult to find a better bunch anywhere; they are all of the same uniform, thick, blocky set type, all but one by Victor Orange, this one being Hudson Captain 156300, a son of the pure Scotch Imp. Village Captain 135232." Mr. Stunkel's consignment embraces the most fashionable families of the breed, and he adds, "These bulls are in nice condition, and I am satisfied my stock will sell well if the buyers will turn out to see them."

Col. Lafe Burger has inspected the cattle consigned by Messrs. Swain, Burline, Crittenden, and Locust Grove Farm, and writes as follows concerning them: "This stuff is first-class, in fact, three of the Shorthorn bulls are 'crack-jacks.' One of them, Lavender Lad, a red of November '04, is a show-bull, and considered the peer of any young bull in Kansas or Oklahoma, having been shown a number of times and never defeated. He is of the true Scotch

Horse Owners! Use

GOMBAULT'S

Caustic Balsam

A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from HORSES and CATTLE. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., Cleveland, O.

Money Back

BE SURE AND WORK THE HORSE

Bickmore's Gall Cure

is guaranteed to cure all chaps, bruises, cuts, grease heel, scratches or torn or scratched teats, etc., in cows. Take no substitute. See trade mark. Every horse owner can have our illustrated Horse Book and large sample box Gall Cure for 10 cents for postage on both. Write today, or ask your dealer.

Bickmore Gall Cure Co., Box 916, Old Town, Maine.

Bog Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid)

is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Spint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes, and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists, 212 Union Stock Yards, Chicago, Ill.

KRESO DIP KILLS LICE

ON ALL LIVE STOCK EASY & SAFE TO USE

BLUE CATTLE LOUSE

KRESO DIP KILLS THIS AND ALL OTHERS

RED CATTLE LICE, HORSE LICE, MOG LICE, SHEEP LICE & TICKS, POULTRY LICE, DOG LICE AND FLEAS

Write For Free Booklets For Sale By All Druggists

PARK, DAVIS & CO.

HOME OFFICES AND LABORATORIES: Detroit, Mich.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U.S.A.; Walkerville, Ont.; Montreal, Que.

type, and bred in the purple. Another good one, listed by Mr. Swain, is the February yearling by Orango Lad 17270, out of Miss Graceful by Red Royal 12913, a thick-lashed fellow of much promise. Mr. Foster's dark-red 2-year-old Cruickshank-topped Young Mary, "Sucess," is another attractive offering, by the choicely bred Lovely Gloster 184123, dam by the Bellows bred Scottish King 100743. As space forbids, it is impossible to describe the entire consignment, 75 head of both breeds being listed. Catalogues will be cheerfully forwarded upon application to D. R. Mills, sale manager, Des Moines, Iowa.

Darling Brothers' Shorthorn Sale.

Last Saturday Darling Brothers, of Stella, Ohio, who rank among the foremost breeders of the East, sold at public auction, at Mankato, Kans., a consignment of Shorthorn cattle, consisting of nine bulls and seven heifers. The sale was something in the nature of an experiment as there was some doubt as to how the breeders of Kansas would appreciate an offering of this kind. The cattle were shipped by freight from Stella, Ohio, to Randall, Kans., arriving there ten days ago. From Randall they were driven to Mankato the day before the sale, a distance of sixteen miles, and in spite of all rough handling and the long drive, they were as fresh as though they had just been taken from the feed-barns, and it was the opinion of every breeder present that a finer lot of thoroughbreds had never before been offered to Kansas buyers. Had these cattle been earlier in the season the average prices would have been much higher, but being so late many breeders had made previous arrangements for their herd-headers, but in spite of the adverse conditions the stock sold well. The top price was paid for the 2-year-old bull Duke of Evergreen 34th 252726, which went to J. M. Baker, the well-known Shorthorn breeder of Narka, Kans., for \$165. The following is a complete list of the purchases at the sale:

Three-year-old heifer, August Good,	\$65.00
Three-year-old heifer, August Good,	75.00
Three-year-old heifer, John Baker, Narka, Kans.	97.50
Two-year-old heifer, August Good,	77.50
Two-year-old heifer, P. O. Green, Mankato, Kans.	75.00
Two-year-old heifer, Dazy Bros., Mankato, Kans.	80.00
Aged cow, Harry Wheeler, Jewell County.	117.50
Total.	\$587.50
Average per head.	\$83.93
Two-year-old bull, J. M. Baker.	\$165.00
Two-year-old bull, Jno. Kemmer, Mankato, Kans.	117.50
Two-year-old bull, Dazy Bros.	90.00
Two-year-old bull, H. J. Damenberg, Gaylord, Kans.	100.00
Two-year-old bull, H. C. Akrens, Mankato, Kans.	100.00
Two-year-old bull, C. Ellis, Mankato, Kans.	90.00
Two-year-old bull, Jno. Kemmer	87.50
Two-year-old bull, Geo. Meadner, Mankato, Kans.	662.50
Two-year-old bull, Barker Bros., Aurora, Kans.	95.00
Total.	\$907.50
Average on bulls.	\$100.83

Where the Grand Champion Grew.

On the little farm of John W. Baker, in the hills northeast of Strong, Kans., the stage is being set for the closing act of a most interesting chapter in Shorthorn history. The man that bought, developed, and first showed the grand champion bull, Master of the Grove, goes out of business May 16, and on that day will hold his first and last public sale—a dispersion. Ill health—the only thing that could separate him from his loved Shorthorns—is the cause.

In this sale, to which Mr. Baker invites his neighbors and his friends, the breeders from everywhere will be mature cows, heifers with their first calves, heifers unbred, and a few young bulls, some ready for service and some too young. About half the offerings will be by Master of the Grove. Several of them and some of the calves out of Master of the Grove cows are suitable material for the fall shows. Some of the best very young things are by Lopez 231291, a son of Mr. Babst's famous Lord Mayor, that promises to be as great a sire and show animal as Master of the Grove proved to be. Here is truly a select little herd of cattle, and its dispersion will be one of the most interesting events in Kansas fine-stock history. Remember the date—May 16—and send to Mr. Baker for any particulars desired.—Telegram.

Dipping the Armour Herefords.

The annual dipping of the Armour Herefords in Car-Sul Dip is now in progress at the Meadow Park Farm just south of Kansas City. In speaking of the benefits to be derived from the regular dipping of cattle and other live stock, Mr. W. J. Cummings, manager of the Armour herd, recently remarked that he thought the dipping of live stock would continue to increase in popularity because of the benefits to be derived from the use of efficient disinfectant dip such as Car-Sul. The annual dipping of the Armour Herefords is not done because of mange, or anything of that character, but because Mr. Cummings believes that dipping is beneficial to the general health and condition of the animals. They have made it a practice for several years and use only Car-Sul.—Telegram.

M. C. Vansell, of Muscotah, Kans., makes a change in his advertisement this week and offers his herd-bull for sale. This bull is 3 years old and weighs a little over a ton in good breeding condition. He is not fat. He is not sold for any fault, but because Mr. Vansell must make a change in his herd. The bull is just the right age, and in just the right condition to do good hard service. Somebody will get a bargain in this bull. Write at once and mention THE KANSAS FARMER.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed.

News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master.....N. J. Bachelder, Concord, N. H.
Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary.....C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master.....	E. W. Westgate, Manhattan
Overseer.....	A. P. Rearrison, McLouth
Lecturer.....	Ole Hibner, Olathe
Stewart.....	R. C. Post, Spring Hill
Assistant Stewart.....	Frank Wilzwell Ochiltree
Chaplain.....	Mrs. M. J. Ramage, Arkansas City
Treasurer.....	Wm. Henry, Olathe
Secretary.....	George Black, Olathe
Gatekeeper.....	J. H. Smith, Lone Elm
Ceres.....	Mrs. M. L. Allison, Lyndon
Pomona.....	Mrs. S. M. Phinney, McLouth
Flora.....	Mrs. S. J. Lovett, Larned
L. A. S.	Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman.....	Topeka, Station A
E. W. Westgate.....	Manhattan
George Black, Secretary.....	Olathe
Henry Rhoades.....	Gardner
J. C. Lovett.....	Bucyrus

STATE ORGANIZER.

W. B. Obryhim.....	Overbrook
--------------------	-----------

Osage County Pomona Grange.

The Pomona Grange, of Osage County, met in Hurricane Grange hall in Overbrook at 1:30 o'clock, April 7.

The weather was very rainy and the roads extremely bad, so the meeting was not as well attended as usual. There were twenty delegates present, and probably about that many visitors.

Trustees elected for this year were as follows: O. L. Tabor, of Burlingame Grange; A. L. Ovessen, of Highland Grange; and Jos. Bulmer, of June-
tion Grange.

There was some informal discussion in regard to ways and means of increasing Grange work and influence throughout this county, also concerning Grange property insurance.

The question for discussion, "The Initiative and Referendum," was placed before the meeting, but it was getting so late and was so rainy that some of the members were obliged to leave, so the discussion was cut short. However, our Pomona secretary, Lester Pierce, of Richview Grange, has agreed to prepare an article on the same topic for the next meeting, which will be followed by a discussion in which it is hoped many will take part. The referendum has been endorsed by the State Granges of at least eighteen States, among them being the Kansas State Grange. This is a non-partisan movement for the establishment of the people's sovereignty in place of machine rule, and in some States has made much progress.

The question of Grange life insurance will be brought up at the next meeting, which will be at Melvern, July 28.

At the last meeting of Hurricane Grange, a suggestion was offered by W. T. Diekson that an effort be made to get enough Osage County patrons to fill a car to attend the next meeting of the National Grange, which will be held in November at Denver, Col. This plan will probably be brought up at the next meeting of Pomona Grange.

Remember the date, July 28, Melvern, and come prepared to say or do something to help make an interesting meeting. JENNIE E. HEBERLING, Lecturer, Pomona Grange, Osage Co.

The Grange in Osage County.

EDITOR GRANGE DEPARTMENT:—Carbondale Grange No. 754 is in a prosperous condition. We have recently received five new members by initiation, and have four new applicants ready for the ceremony at our next meeting. Every one of our members seems to take an active part to make our meetings interesting.

We have had under consideration the question of good roads until we have got it in action. Every neighborhood has a King split-log drag, and after each rain the roads are dragged, and in this way we are succeeding in having good roads. We think those neighborhoods that have no drags yet will soon fall into line, and we will eventually have good roads all over the county.

Osage County Pomona Grange met at Overbrook in April, but owing to rain and heavy roads the attendance was small. The next meeting will be held at Olivet on the fourth Saturday in July.

Carbondale Grange meets every Wednesday night, and the meetings are interesting and profitable. We extend a cordial invitation to the members of other granges to visit us.

A. P. STENGER, Lecturer.



Dr. Hess Poultry Pan-a-ce-a is the best aid for growing poultry—a tonic that helps a fowl eat more food and thoroughly digest it, forcing a rapid, healthy growth. It tones the egg-producing organs, so hens lay in all seasons. It quickly builds flesh on market poultry. It cures all poultry disorders—gapes, roup, cholera, indigestion, leg weakness, diarrhea; makes it possible to keep the whole flock in perfect health all the year round.

DR. HESS Poultry Pan-a-ce-a

is the prescription of Dr. Hess (M. D., D. V. S.), containing the ingredients recommended by science for increasing digestion and assimilation, also supplying iron for the blood and toning up the entire system. It has special germicidal principles which destroy all minute bacteria to which fowls are so subjected. Poultry Pan-a-ce-a is the greatest tonic for the young, makes them grow fast, healthy and strong. It bears the endorsement of leading poultry associations in the United States and Canada. Costs but a penny a day for about 30 fowls, and is sold on a written guarantee.

1 1/2 lbs. 25c, mail or express, 40c; 5 lbs 60c; { Except in Canada and
12 lbs. \$1.25; 25 lb. pail \$2.50. { extreme West and South.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK, Ashland, Ohio.

Makers of Dr. Hess Stock Food.

INSTANT LOUSE KILLER KILLS LICE

A Square Deal Wanted.

Iowa cries for a square deal in the interstate commerce law situation, and the remarks of A. B. Judson, master, are pertinent. They follow:

"Nearly twenty years ago, when the farmers secured the enactment of the interstate commerce law with a commission that was supposed to have power to enforce the law, there was general acquiescence in the result as a moderate exercise of the constitutional powers of the Government. The law went into effect and remained in full force for several years without injury to the railroad corporations and to the general satisfaction of the public. I have wondered why a measure so just and moderate and so thoroughly tested and fortified by experience should evoke so much opposition from certain quarters. All that the people want is a 'square deal,' and that they are going to have, and the quicker the corporations realize that fact and withdraw their opposition to President Roosevelt's plan, the better it will be for them."

More Happiness and Prosperity

Is the result of the work of that great fraternal organization, the Grange, says the master of the Iowa State Grange.

"It is the purpose of this great fraternal organization to increase happiness in all our farm-homes and to make agriculture more prosperous in all parts of our glorious country. This organization teaches, among other things, that honesty, integrity, fair dealing, giving value received in all exchanges, industry, frugality, and thrift, and observing the Golden Rule are essential characteristics of good citizenship, setting its seal of condemnation on all forms of fraudulent practices, extortion, or robbery, whether done under the form of law, combination, monopoly, or trust methods, or by the more vulgar practice of common stealing, thus building up a public sentiment that the man or corporation that simmers millions of dollars in any other way than honorable methods, based on the principle of always giving value received. This organization places its seal of condemnation on all forms of modern graft, whether in high places or low. Let the guilty be punished, whether they are millionaires or paupers, public officials or private citizens."

McLaughlin Bros., of Kansas City, Columbus, and St. Paul, have this to say about their importations of Percheron stallions: "Our regular importations take place each year in July and November. Those are the months in which we expect to receive most of our horses; but our business has been so large, and the demand upon us has been so great during recent years that we have been obliged to make many more frequent importations. Although our stables were full and we had an overflow of about 20 stallions on the first of January of this year, yet we have already received one importation of 42 stallions, and we received a cable message this morning from Mr. James McLaughlin, in which he says that he is sending 48 more stallions on the Atlantic Transport Steamship 'Minnetonka.' Mr. McLaughlin will bring over his largest importation in July, most of which are already bought, to be delivered after the breeding season will be over. The 42 stallions that came last month are nearly all sold. The 48 that are coming will hardly supply the demand until our regular July importation will arrive."

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 8th St., Kansas City, Mo. State number in party and when going.

Home Departments

CONDUCTED BY RUTH COWGILL.

Laus Mortis.

Nay, why should I fear Death,
Who gives us life, and in exchange
takes breath?
He is like cordial Spring,
That lifts above the soil each buried
thing;
Like Autumn, kind and brief—
The frost that chills the branches frees
the leaf;
Like Winter's stormy hours
That spread their fleece of snow to
save the flowers;
The lordliest of all things—
Life lends us only feet, Death gives us
wings.
Fearing no covert thrust,
Let me walk onward, armed in valiant
trust—
Dreading no unseen knife,
Across Death's threshold step from life
to life!
Oh, all ye frightened folk,
Whether ye wear a crown or bear a
yoke,
Laid in one equal bed,
When once your coverlet of grass is
spread,
What daybreak need you fear?
The Love will rule you there that
guides you here.
Where Life, the sower, stands,
Scattering the ages from his swinging
hands,
Thou waitest, Reaper, lone,
Until the multitudinous grain hath
grown.
Scythebearer, when thy blade
Harvests my flesh, let me be unafraid.
God's husbandman thou art,
In His unwithering sheaves, oh, bind
my heart!

—Frederic Lawrence Knowles, in
"Love Triumphant."

The Resurrection.

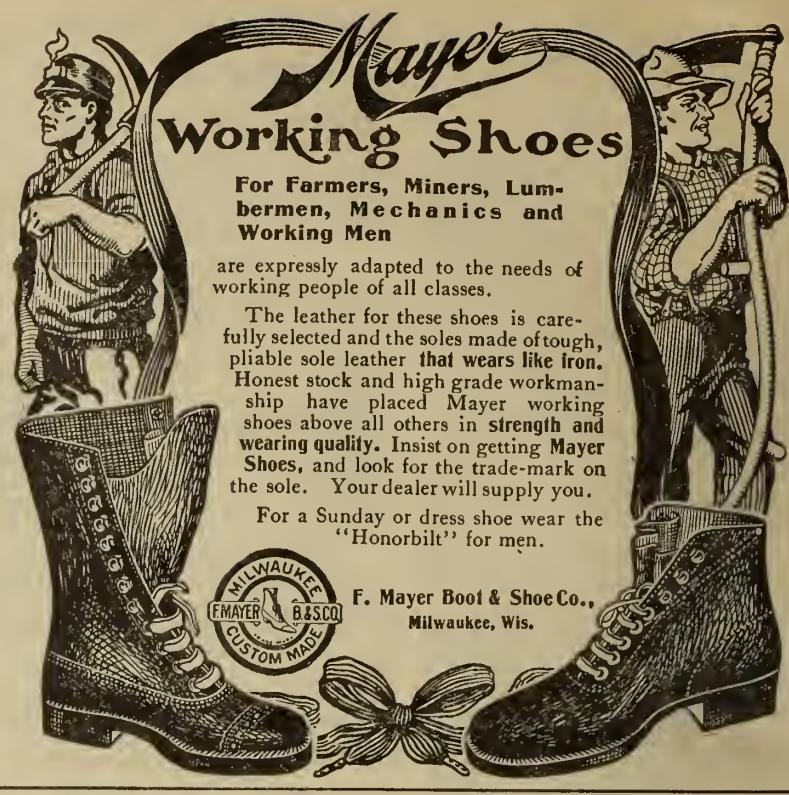
FLORENCE SHAW KELLOGG, FAY, KANS.

"But yesterday all life in bud was hid;
But yesterday the grass was gray and
sear,
To-day the whole world decks itself
anew
In all the glorious beauty of the year."

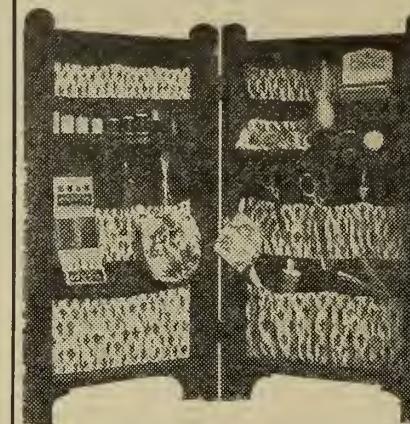
To-day our hearts thrill with life
and hope, and we have each one our
share in the glad new life and beauty
—In the springtime resurrection. We
want all the world to be good and
glad; we went every one to have a part
in the sunshine, a chance for each to
come to his or her own of life and work
and joy. When we look out over the
wide stretching fields and notice how
each plant, be it large or small, beau-
tiful or not beautiful, has yet its place
and room to come to its best of fruit
and seed, when we see how nature
cares for her own, how "Spring shall
plant—and autumn garner to the end
of time," and we know nothing shall
be lost or fail of its purpose, then
turning from nature to man, how it
hurts us to think of the "submerged
lives," myriads of people who are
downtrodden and oppressed and have
small chance to know how good and
beautiful life can be made. Then we
think with joy and gratitude of the
brave men and noble women in all
parts of the world who have given up
their lives, all of their money, time,
and strength for the improvement of
the lives of others, those who have
gone down from life's pleasant places,
out of ease and luxury, that they
might make a light to shine in the
dark places, and so to help the weak
and erring, the sin sick and desolate
to become strong, true, happy, and
useful. We think of beautiful Jane Ad-
dams, who John Burns calls "The only
saint America has produced," but we
know there are others just as earnest
and sincere, just as helpful as she is,
and would do justice to them while
taking nothing from her. We recall
how the "little seed thought," from
which Hull House and all its beautiful
activities, all its helpfulness has
grown, fell into the good soil of her
Soul when she was but six years old,
there to be guarded and nourished until,
"In the fullness of time" it bore
beneficent fruit to which many, not
only of Chicago's poor, but those of
other great cities can bear witness.
The uplifting, virifying influence of
Hull House, and all such houses
spreads like the sunshine into the far
places out and out we know not where,
nor to whom. We only know it is for
good wherever it goes, and we thank
God and take courage for our kind.

Among the most helpful influences
of this kind, where the work done
brings a resurrection of life and all
that makes it worth living—love, hope,
and joy, is the old "Jerry McAuley
Mission," in New York. It is inspiring
only to read of the work being
done there. What must it be to see
it, to share in it, and so to know of
our own observation of the redeemed
lives there? There, under the first
span of the great Brooklyn Bridge on
Water Street, is the mission house that

has been to so many as the open gate
to Heaven, to a life of hope and love
and purity after they have sunk so
low that it seemed almost impossible
they could ever rise again. Once it
was a dive of the lowest kind kept by
Jerry McAuley, who at that time was
styled "the wickedest man in New
York." Some earnest young women
missionaries entered there one day
thirty years ago and asked to be al-
lowed to sing and pray. The permis-
sion was given, and despite the jeers
and ribald jokes cast upon them, they
came again, until in time McAuley felt
the stirrings of better impulses within
him, and yielding to the good that
never wholly dies in any man's soul,
because it is of God and can not die,
he threw off the yoke of his past life,
changed his dive to a mission house,
and worked as earnestly to redeem his
kind as he had before worked to drag
them down. Because he was so thor-
oughly one of them, because he knew
by his own experiences "What strength
must be set against a sin," because he
had felt all the power of temptation,
he knew just how best to meet and
help those who came to him. His
methods and his work were unique, but
it all told mightily for righteousness,
and the lowest and the vilest took
"heart of hope" and struggled slowly
upward and though they fell again and
again many times over, as many times
did he forgive and forget and sought
again to help them. He never let go
of one on whom he had "laid hold," as
he would say. Only recently I have
been reading of Rev. Samuel Hopkins
Hadley, who became McAuley's suc-
cessor and went on with his work af-
ter he was called higher. Of a fine
family directly descended from Jona-
than Edwards, Samuel H. Hadley,
wealthy, educated, and honored, yet
fell a victim to drink, fell to the lowest
depths of degradation. His last penny
was gone, but he was too weak and
unarmed to drag himself to the river
and drown himself, as he had resolved
to do when he should reach this point
in his downward way. He tells us how
while he was sitting in this condition
in a miserable saloon he "suddenly be-
came aware of a great presence" with
him, and under the influence of that
presence he vowed "never to touch an-
other drop of intoxicating liquor," and
to make it possible for him to keep
this vow he "dragged" himself to a
police station and begged to be locked
up for the night. He says "All the
demons in hell were locked in with me
and I fought all night long for my
soul," but the power of the good was
stronger than the power of the evil,
and Hadley kept his vow. Soon after
he was induced "by a fellow sinner" to
go to the mission house on Water
Street. He found it so crowded and
packed with those who, like himself,
were seeking the better way, that he
could hardly make his way to the
front. Men and women of every type
of degradation were there. He knelt
with a crowd of drunkards. Jerry Mc-
Auley's prayer was simple and direct.
"Dear Savior," he said, "won't you look
down in pity upon these poor souls?
They need your help, Lord, they can
not get along without it. Blessed Jesus,
these poor sinners have got them-
selves in a bad hole, won't you help
them out? Speak to them Lord, do, for
Jesus' sake, Amen." Then he told them
to "pray for themselves," and "tell the
Lord what you want Him to do for
you." He put his hand on Hadley's
head and said, "Pray, brother." "I can
not, you pray for me," was the answer.
McAuley showed his wisdom by reply-
ing, "All the prayers in the world won't
help you unless you pray for yourself,"
and "with a breaking heart," Hadley
said, even as a child might say, "Dear
Jesus, can you help me?" "Although
up to that time," he said in telling of
it all afterwards, "my soul had been
filled with unutterable gloom. I felt
I was a free man, that Christ with all
His love power had come into my life.
Oh, the precious feeling of safety, of
freedom, or resting in Jesus!" So he
was saved to himself and to God, saved
to become a mighty power for good
among these lowly people. He never
again wanted whisky, so complete and
radical was the change in him. When
in time McAuley "slept in death," Mr.
Hadley became the head of the mission
and gave all he had, all he was to the
work there. Being richly gifted by na-
ture, of a family of wealth and culture,



F. Mayer Boot & Shoe Co.,
Milwaukee, Wis.



Send for free booklet to-day—it's so easy to
forget it—and please mention Kansas Farmer

ART CRAFT WORKSHOP, 342 Dearborn Street, CHICAGO, ILLINOIS

he might have ranked high in the
world of men and affairs, but dearer
to him than all else was this mission
located there "Where trains banged
and thundered day and night over head,
and all around were the grinding, dis-
cordant noises of machine-shops." He
"would rather live there than in any
other place on earth," he said, and
there he lived and worked until just
recently, when he was called to his re-
ward. Called to his reward I say, but
did he not have his reward daily, hourly
in witnessing the improved lives of
those around him? In seeing them
give up all evil ways and live clean,
strong lives? Each one a help and a
power to incite others to greater ef-
fort and more earnest striving for all
that was good and pure? The mission
was, and is, a place where the lowest
could come in the sure hope of help
and encouragement. No matter how
it is elsewhere, though he may be
watched and distrusted everywhere
else, here he is left perfectly free, here
not a breath of suspicion meets him,
here is no watching, no restraint. He
is met as a brother, given food and
clothing, warmed and cheered and
cared for as by a band of loving broth-
ers. Here Mr. Hadley said, "If a man
cheats me nineteen times, I shame him
out by trusting him the twentieth
time." Here, however often he might
fall, strong hands were never lacking
to help him up, and all the atmosphere
was that of love and trust and help-
fulness. Hadley's faith in human na-
ture was boundless and his spirit as
truly the spirit of Jesus as man's ever
was. His methods were so wise and
so successful that leaders of religious
thought and sociological workers came
from all parts of the world to learn
of him, and oh, how his people, those
for whom he gave him life, how they
loved him. Truly he made the sinful
to become pure, the weak strong, and
the desolate to rejoice. He lived his
creed and made it easy for men to be-
lieve in a God of infinite love and pa-
tience. The grief at his death is great
and sincere. His going has indeed left
a great void there, and though good
men may be plenty, it will be long ere
a leader be found to take his place and
fill it. It is impossible to measure the

Her Majesty's Sewing Cabinet

"Enclosed find check for Sewing Cabinet. It is
fully up to expectation and my wife is greatly
pleased with my purchase." P. M. BUSHNELL,
Cashier, Richland Savings Bank, Mansfield, O.

We receive such letters daily. There are no
disappointments—it pleases them all.

This graceful, handsome piece of furniture
is produced by the hands of careful, pain-
staking craftsmen in our own little workshop.

Each Cabinet is completely equipped with
everything a woman needs to sew with, and
here are fourteen pockets that hold all of her
unfinished work—keeps all the sewing together.
It's a perfect delight—"makes real pleasure
out of real work"—and is just the thing
any Kansas Farmer reader will enjoy.

Write for our free descriptive booklet with
prices for the different styles, and also please
tell us the color scheme of your sewing room
that we may suggest a cabinet that will har-
monize with its furniture, fittings and dec-
orations. We pay the freight.

ANYONE WISHING
UNITARIAN SERMONS and
PUBLICATIONS
SENT FREE, may address Mrs. F. O. Leland,
Concord, Mass.

FREE BOOK Tells how to build Walks, Floors,
troughs, cisterns, roofs, tanks, etc.
Cheap, sanitary, everlasting. Given to any person
sending 50 cents for a year's sub-
scription to our practical paper.
ON CEMENT
THE CEMENT ERA, 207 Tolsma Bldg., Detroit, Mich.

A Harvest of Dollars
The Ideal place for profitable investments is in the
Ozarks. Write to-day. The Ozark Mutual
Town and Land Co., 527 Victoria Building,
St. Louis, Mo.

More Money Made as Local Agent
**FOR FARMERS FIVE
YEAR ACCOUNT-BOOKS**

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N. Y.

BARGAINS Chinaware Sets, \$2.80 to \$12
Clothes Wringers, new, \$1.00
26 Piece Table Cutlery, good plate, \$2.50
Sure-Cutter Shears and Scissors, 2 pairs, .50 cts
Wade & Butcher Razor Strap and Bone, \$1.00
\$1.00 box Medicated Toilet Soap, .35 cts
Headquarter for Watches, .75 cts. to \$18.00
Black Gloss Buggy Paint, gallon, \$1.50
Gasoline Stoves, 2 burners, .25 cts
Poultry and Stock Foods, packet, .15 cts
Cigars, per 100, \$1.50 to \$2.50
Washing Machines, none better, \$3.25
Send for Catalogue of many snap bargains.
Agents wanted. New Process Mfg. Co., Dept.
50, Lincoln, Kans.

**Death of Floral Lawn
Cause, Smothered by Dan-
delions**

The dandelion pest has had its day. For one dol-
lar you can get an instrument that can be used by
women and children as well as men that will pull
dandelions and other noxious weeds at the rate of
one thousand an hour, and leave not a drop of dirt
nor a visible tear in the sod. No stooping nor bending
and is a pleasure not a task to operate it; deliv-
ers automatically the weeds pulled, and your
hands are not soiled, nor your back tired, no grunt-
ing nor humping around to do your work. Pulls
any dandelion or weed when tap root does not ex-
ceed 16 inches in length. Send one dollar and we
will deliver free at your door.

The Standard Incubator Co.
PONCA, NEBRASKA

good he has done. We can not number the lives of men and women he has helped. As well might we try to compute the good of the sunshine or count the flowers that each day are hearing the call of the springtime and are lifting glad faces to the glad sky. We only know the good work will go on and on, and generations yet unborn will know and love the names of these earnest men and women who have given themselves in love to the work of bettering human lives, of bringing a beautiful resurrection after the winter of sin has past.

There are others of whom I would tell you, but they must wait until another week, as I would not encroach too much upon the space in the dear old FARMER.

The Young Folks

Just Like a Woman.
When pa came home the other night he had a happy smile
And said to ma that we would soon be livin' in great style.
Because a man had been around that day to let him in,
Just as a favor, on a thing that couldn't fail to win.
"He'll let me have the stock," says pa,
"at fifty cents a share
If I'll subscribe to-morrow, for there's little left to spare.

"He'll let us in at fifty cents for every share we buy."
Says pa, while ma she didn't seem to hardly bat an eye,
"And in six weeks from now if we've made a mind to let it go
We'll get ten dollars for each share—that's estimated low.
I've seen his papers and they're straight; there ain't a chance to lose—
Say, what's the trouble with you, ma?
You don't seem to enthuse."

"If it's as good as that," says ma, "I can't quite understand
What makes him want to let it go. Of course it would be grand
To get the money, but I'd feel as though it wasn't fair
To rob him, as we would if we should take a single share."
"Confound a woman, anyway," says pa,
"she always seems
To want to wake a person when he's naving pleasant dreams."

—Chicago Record-Herald.

Fleetfoot; the Autobiography of a Pony.
MARION SEWELL.

CHAPTER IX.—BAD MAN'S LANE.

The day after school was out I frisked in the big pasture with the colts, but the following morning Lyall brought me home and turned me loose in the front yard. This gave me a feeling of great importance, for the lawn was a beautiful one, full of flowers and shrubs, and if I was not trusted and esteemed I would not have been put there, because any awkward stumbling or nipping of huds would have proven fatal to the looks of the place.

One time when I was roving happily about quite near the house a prim old lady, who had been spending the afternoon with Mrs. Dearcot, came out of the parlor and seeing me threw up her hands in horror, exclaiming, "Why, you let the horses run in your lovely yard!" Not the horses," smiled Mrs. Dearcot, "only the children's pony. He nips the grass so neatly they sometimes call him their little lawn-mower."

The visitor laughed knowingly and shook her head. "It's all right for a while, but you will forget to watch him by and by and all those flowers which you value so much will be swept out of existence."

"How full of despair you are to-day, Mrs. Brahm," pleasantly rejoined Mrs. Dearcot, as she led her friend out among her plants, and picking a few blossoms from every flowering shrub she soon had a mammoth bouquet which she presented to Mrs. Brahm, who accepted it with many protestations. I began to think that this good woman envied me my place in the midst of so much beauty, and wishing to prove that I bore no ill will, I reached over to smell and admire the bunch of modest violets in her bonnet, but when she felt my warm breath on her neck she gave a smothered scream and walked with agility through the open gate. Then Mrs. Dearcot said, "Why, Pony!" in a reproachful tone, and I turned away and began to graze, being convinced that there were people in this world who could never view things in the right spirit.

Of course, Mrs. Brahm's prejudice had nothing to do with my history; I merely wish to hint that it was a real honor to be allowed several days in the week to roam unfettered and unwatched in the near vicinity of one of the finest dwellings in the neighborhood.

When Lyall was bringing me home from the pasture that morning in June

which I have before referred to, he sang blithely all the way. I knew that some treat was in store for him and was hardly surprised when he told me the particulars.

"I do wish you and Marcella might come also," he began in an assumed voice of apology. "But neither of you would enjoy it much I'm afraid. You see I'm off to Grandpa's, and a lot of us fellows are going to fish, boat-ride, and climb trees, and a whole bushel of other things that you could never learn to do." Here he snickered unnecessarily. "So you'd better stay at home and enjoy a quiet life," he added gaily as he stroked my neck. I didn't want to go, and Lyall did not need to get funny because I was left behind, but then the lad was so happy that I suppose he hardly knew what he was saying. After some more talk about Grandpa's shady trees, tender grass, and juicy apples, Master Dearcot pinched my chin and started off to be on hand for his train.

The time passed quickly, and a little while before the regular noon hour Marcella's head appeared above the little blue gate, and I knew from the way she called me that my dinner was ready. I hurried and we both went to the wood-shed where my meal of oats, corn, hay, and apples was awaiting me. A pail of cold water was there also, and while I drank Marcella ate one of my apples.

It must have been one o'clock when Daisy Floyd came. Marcella had been trying to do fancy-work, but I could see that although she held her needle gracefully in her hand, her eyes roved over the hills and far away. Yet who could work on a day like that? I'm sure I could not, and of course Marcella shared my feelings. The sky was too blue, the air too warm, the songs of the birds too piercingly sweet to allow joyous youth to take up a task and finish it. Even the bees with their reputation of always being busy seemed to do nothing but hum, and so long did they keep it up that I grew drowsy, and all the energy which I possessed deserted me.

Marcella suddenly dropping her work clapped her hands and exclaimed, "Hurrah!" Looking up I saw Daisy Floyd coming into the yard.

"Hurrah yourself," she responded, as she tripped up the steps.

"I was so afraid you wouldn't come," said my little mistress, "and I see you've brought your box."

"I have," returned the small maid, "and where is your box?"

"It's ready. Everything is all fixed but Pony, and I can harness him in a minute." My heart sank. This, then, was my dream of idleness in the shade; but since Marcella wished it I could run the risk of getting overheated.

We started down the road and I was willing to show my best paces, but Marcella encouraged me to take my time and I did. Meanwhile, I could not help overhearing the conversation of the two lassies behind me.

"I am going to have a party before long," announced Daisy triumphantly.

"Oh splendid!" cried Marcella, and in her excitement she gave a tweak at the lines.

"It is to be a wild-flower social," continued Daisy. "I thought it out a long time ago."

"Will the invitations be printed?" asked Marcella in an awed tone.

"They'll be typewritten. Cousin Gilbert has a typewriter, you know, and he has promised to do my work." Daisy made this statement with such an air of importance that I nearly stepped off an old bridge, so greatly was I amused.

"There's one now!"

"Where?"

"Right up against the fence." And with this startling announcement both girls tumbled out of the buggy, and bringing two small wooden boxes, fell to work digging at the roots of a dyspeptic-looking plant.

In a short time, but not before the botanists were perspiring freely, the roots began to show themselves, and the next moment they were receiving a vigorous shaking to remove all traces of soil.

"Won't Miss Benton be surprised?" queried Daisy repeatedly, but Marcella seemed to have lost confidence.

"I'm so 'fraid," said she, "that they are not the right kind. Miss Benton showed us some the other day, and they were worlds thicker than these. These are so thready."

"Pshaw!" exclaimed Daisy. "They'll press out the same as those Miss Benton had. Very likely what we found are young."

"I hope so," returned Marcella, as they again climbed into the buggy.

"Every one that comes to my party

LOWELL INGRAIN CARPETS

"The all wool kind"

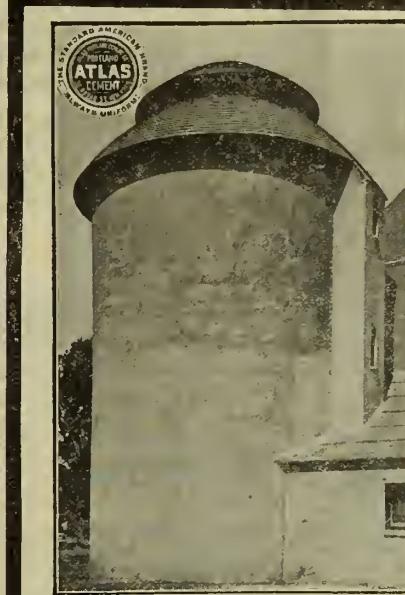
We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,** New York



A CONCRETE SILO
Gedney Farms, White Plains, N. Y.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

Cheap Excursions Southwest

Low Rates each first and third Tuesday, monthly

Round-trip tickets sold from nearly all Rock Island points in the North and Central West to practically all points Southwest.

Rate about half the regular fare.

Pluck means sure success in the Southwest. An illustrated book or two will help you to a better acquaintance with the country. I'll be glad to send them on request. State the section which most interests you.



A. M. FULLER, C. P. A.

TOPEKA, KANSAS

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

T. L. KING, C. P. & T. A., TOPEKA, KANSAS.

must be a wild flower," Daisy remarked as if there had been no interruption. "and I'm going to invite the whole school except the Howler girls. They stay at home."

"Oh Daisy! why would you do that?" I could easily imagine Marcella's shocked face as she asked the question.

"A dozen reasons," responded Daisy in an impressive voice that caused me to stumble, being so interested and amused. Then she went on: "They are not very rich, nor very smart, nor in the least pretty, and they have such horrid names, and I'm not going to invite them. So there!"

Marcella unsteadily pulled one line and then the other, and as I did not know where to go I started down a narrow side lane.

"Daisy Floyd," she said with a quaver in her voice, "I never knew you were so mean. I'm sure, though, your mama will make you invite Hester and Georgie and Prissy. Hester beats you and me in geography, and you all to pieces in arithmetic, and that's why you want to slight 'em."

For a little while there was no response; then Daisy gave a guilty snicker. "Cousin Gilbert would think I was crazy if I asked him to write me an invitation to Hester Howler," she said.

"Oh, it's all right, Miss Floyd," returned my little mistress, and added provokingly, "What does j-c-a-l-o-u-s spell?"

A sound of smothered sobs came faintly to my ears. Then a shrill little voice piped up. "Marcella Dearcot, you have no right to dickstate to me. Mama said I could do as I pleased about the party, and now I'm going to walk all the way back home."

No sooner had this direful threat been made than Marcella gave a frightened scream. "Oh, see!" she cried, "we've taken the wrong road and are half-way down 'Bad Man's Lane.'"

"Such a driver!" exclaimed Daisy, in a tone of mingled disgust and fear.

"It's not my fault," declared Marcella, "the bad fairies turned Pony this way because you were so mean about the Howler girls. We'll be murdered to death, for the lane is so narrow we must keep on forever."

When my little mistress started out with, "It's not my fault," Daisy began to advance a contradiction, but at the mention of fairies, in the existence of which she was a firm believer, she was silenced for awhile and her next remark showed the humble state of her mind.

"I don't think anybody lives here at all, Marcella. I believe they call it 'Bad Man's Lane' because there are so many stumps and hills and the road is so fearful rough, just like this, bump, bump, bump."

"Maybe that's it," returned Marcella, "but I've heard folks tell how there's a man who lives all by himself at the end of the lane, and he steals and fights and does everything that's awful. They say he hides in the woods sometimes so he won't be caught and punished."

Affected by the stirring tale, I trotted on briskly over the wretched road, hoping in a blind fashion to outrun possible danger.

"I wish we could turn," complained Daisy after a period of silence. "Surely the lane will get wider after awhile." Almost as she spoke I was forced to come to a standstill, having suddenly encountered a wide, green bank which stretched across the middle of the road.

A great many yards above us perched on a hill was a little black house with one tiny window and a sagging door, through which was emerging a wild-looking man, the sight of whom made me catch my breath in fear. His clothes were old and torn, his black hair long and uncombed, and as he put his hand over his eyes and peered across the neighboring treetops, I felt that he was planning, or had just completed some horrible crime. A little spotted dog came running out and stood beside. The fact that the dog had neither ears nor tail was a final proof of the man's cruelty.

The sharp eyes of the small terrier spied us almost at once, and with excited yelps came bounding towards us. Half-way down the hill he lost his footing and fell headlong over the steep embankment, at the bottom of which he lay and howled out his fright and pain.

The "bad man," not knowing of our presence nor casting a glance in our direction, hurried to the prostrate dog, and gathering the miserable creature up in his arms began soothing and pitying it with all his might.

"Master will fix it up with salve," he assured it over and over again, and then all at once he saw us. With the dog (now whimpering with pleasure) still in his arms he came toward us,

I was sitting on the steps in the twilight, waiting for Ruth and Helen to come. They had gone for a walk before dark.

The Backbone of a Mighty Nation

is good food—food for brain, food for brawn, food that is strengthening, that gives energy and courage. Without a proper appreciation of this great fundamental truth no nation can rise to greatness.

As an article of food, soda crackers are being used more and more every day, as is attested by the sale of nearly 400,000,000 packages of **Uneeda Biscuit**, which have come to be recognized as the most perfect soda cracker the world has ever known.

And so **Uneeda Biscuit** will soon be on every table at every meal, giving life, health and strength to the American people, thus in very truth becoming the backbone of the nation.

NATIONAL BISCUIT COMPANY

Marcella and Daisy could stand no more, and neither being willing to await her turn, both jumped out of the buggy at the same time and with quaking voices began to implore mercy. The "bad man" with much surprise pictured in his peculiar countenance, took hold of my bridle and without a great deal of difficulty turned the whole outfit in a homeward direction. Then as the little girls climbed to their seats he delivered himself of the following, in a singsong voice:

"Little daughters do not fear,
I would not harm you in a hundred
year.
My life is but"—

I heard no more, for I was now going at my fastest gait, and in a wonderfully short time was clear of the lane and out on the wide, smooth road.

We met some people in a carriage and they seemed greatly distressed on our account. "A runaway!" exclaimed a benevolent old lady, and as I dashed past them I heard pitying murmurings about "two poor little children."

The girls did not enter into conversation until I had slowed up some and we were going through the back gate at home.

"I don't think he was so bad, after all," remarked Marcella, reflectively.

"Why?" asked Daisy, who was always on the search for reasons.

"Because he was so good to his little dog."

"Yes," assented Daisy, "and he was good to us, too."

The Little Ones

A Grown-Up Girl.

I've grown to be a great big girl,
My hair is in a braid,
Tho' mama says 'twill take the curl
All out, she is afraid.

And nowadays I dress myself
And that is lots of fun.
And spread my little nightie out
And air it in the sun.

I tug and pull my stockings on,
And then you ought to see
My little 'lastics open wide
As if to bite at me.

They stick their little shining teeth
Into the stocking top
And nip it so it can not slip
For all I jump and hop.

My petticoats are pretty hard
(They button in the back).
Then comes my little morning dress
And, when it's cool, a sack.

And so it's plain how big I am
And how it makes me cross
To have my grown-up brother, Sam,
Say, "Here's our little Floss."

—Rose Warren Campbell, in Good Housekeeping.

The Bungler.

MRS. A. D. GRAY.

I was sitting on the steps in the twilight, waiting for Ruth and Helen to come. They had gone for a walk before dark.

"I think we need a walk to rest us, mother," said Ruth. "Besides, we might meet that bug I told you about. You can't seem to think what it is, and I certainly thought you knew every single bug."

"Well, I'm sorry, my dear; but when you say that it has six legs and two eyes, and can tell me so little else about it, the description would do for hundreds of other bugs. You must learn to be more observing."

"I said it banged right into my face, and kept on banging around. And, oh, now I remember more—it has heavy wings on top and thin, fine ones under them."

"You did look closely, only you forgot to tell me all you saw. Go for the walk now, and when you come back I will tell you about it."

Presently they came running, breathless and eager.

"Isn't it funny, mother? When we got most here, this same old bug banged into Helen's face. I shoved him off, and he came again, and then tumbled right onto the ground. I put my handkerchief over him quick, and he's there now! A boy going by said he was a 'June-bug' but it's only May now. Shall I open the handkerchief? Are you 'fraid?"

"Not the least little bit," I said. "He is quite harmless now. But, oh my, he wasn't a few weeks ago."

"Why, what did he do?" asked Helen.

"To begin with," I said, "'June-bug' isn't his real name at all, though most people call him that. He is a May insect, for he comes the last of April or first of May. Don't you remember the beetles I told you about, and how before they became beetles they were white baby grub-worms? There are over sixty varieties of his family, differing a little from each other."

"Goodness!" said Ruth, "Sixty relations?"

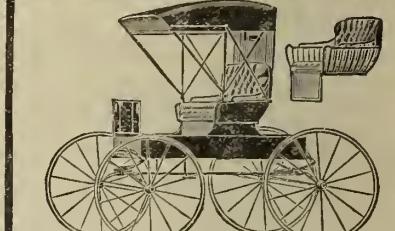
"Oh, as for relations," I said, "there are about 70,000 beetles of various kinds—it's a big family. This one belongs to that family that digs down and cuts off strawberry roots and the green, tender roots of grass. That's when he is a white grub, you know, before his wings and legs grow. He hunts the richest earth and is often found when boys are digging fish-worms. When he becomes a beetle his name is the 'Bungler' or 'May-beetle.' 'June-bug' is only a nickname."

"Under these thick, dark upper wings are two fine gauze wings, folded like a fan. They are a lighter brown. He goes banging around into people's faces, and seems to have no idea of flying, as some insects do."

"Perhaps he's blind like that May-fly," said Helen. "No, here are his eyes; he can see, I am sure."

"The banging about is only one of his habits, caused not from poor sight, but from a weakness of the wings, which makes it hard for him to alter his course quickly, and causes him to strike any object in his way, instead of avoiding it."

"And so people are making a mistake

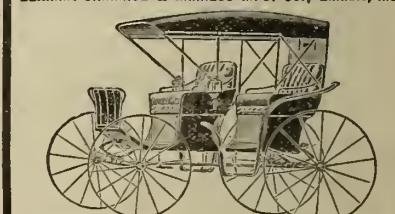


No. 629½, Combination Top Buggy with Bike Gear and ¾ in. rubber tires. Price complete with extra stick seat, \$69.50. As good as sells for \$25 more

33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality and price. We are the largest manufacturers in the world selling to the consumer exclusively. We make 200 styles of Vehicles, 65 styles of Harness. Send for large free catalog.

ELKHART CARRIAGE & HARNESS MFG. CO., Elkhart, Ind.



No. 320. Extension Top Surrey. Price complete, \$70.50. As good as sells for \$25.00 more.

CHEAPER FARM LAND

SOUTHWEST OFFERS BEST OPPORTUNITIES FOR SECURING HOMES

Many farmers in the Northern and Eastern States are selling their high priced lands and locating in the Southwest. Many who have been unable to own their homes in the older country are buying land in the new country.

Unusual opportunities exist along the lines of the Missouri Pacific-Iron Mountain Route. The rich, alluvial, delta lands and river bottom lands of Southeast Missouri, Eastern Arkansas, Louisiana, and Texas, capable of producing 60 bushels of corn, 4 to 6 tons of alfalfa, 150 bushels of potatoes, and other grains, vegetables and hay crops, can be bought for \$7.50 @ \$15 per acre. When cleared and slightly improved will rent for \$4 @ \$6 per acre cash.

Uplands more rolling, lighter soil, adapted to fruit-growing—peaches, pears, plums, grapes, berries—also melons, tomatoes, and other vegetables, can be bought for \$5 @ \$10 per acre in unimproved state. Many places with small clearings and some improvements can be bought very cheap.

This is a fine stock country. No long winter feeding. Free range, pure water, mild climate. A healthy, growing country, with a great future.

Write for map and descriptive literature on Missouri, Arkansas, Louisiana, Texas, Kansas, or Indian Territory. Very cheap rates on first and third Tuesdays of each month.

Address,
C. D. BOYD, T. P. A.,
Indianapolis, Ind.
or H. C. TOWNSEND, G. P. & T. A.,
St. Louis, Mo.

AGENTS WANTED
Sell 1 bottle Sarsaparilla for \$3.00,
best seller, 200 percent profit.
Write today for terms.
F. R. Greene, 116 Lake St., Chicago.

when they say, "As blind as a beetle," said Ruth.

"Yes, that saying and the name 'Bumgier' both come from the way he lies."

"Oh, mercy me, but I'm getting to know a lot!" said Helen, "and the more I learn, the more there seems to be."

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).

Women's Club, Logan, Phillips County (1902).

Domestic Science Club, Osage, Osage County (1888).

Ladies' Crescent Club, Tully, Rawlins County, (1902).

Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).

Chautauk Club, Highland Park, Shawnee County (1902).

Cultus Club, Phillipsburg, Phillips County (1902).

Literateur Club, Ford, Ford County (1903).

Sabean Club, Mission Center, Shawnee County Route 2 (1889).

Star Valley Women's Club, Iola, Allen County (1902).

West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).

Fortnight Club, Grant Township, Reno County, (1903).

Progressive Society, Rosalia, Butler County (1903).

Pleasant Hour Club, Wakarusa Township, Douglas County (1899).

The Lady Farmer's Institute, Marysville, Marshall County (1902).

Women's Country Club, Anthony, Harper County.

Taka Embroidery Club, Madison, Greenwood County (1902).

The West Side Study Club, Delphos, (1902).

Prentiss Reading Club, Cawker City, Mitchell County (1903).

Cosmos Club, Russel, Kans.

The Sunflower Club, Perry, Jefferson County (1905).

Chaldean Club, Sterling, Rice County (1904).

Jewell Reading Club, Osage County.

The Mutual Helpers, Madison, Kans. (1906).

West Side Study Club, Delphos (1906).

Domestic Science Club, Berryton, Shawnee County (1906).

Mutual Improvement Club, Vermillion, Marshall County (1906).

(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

Immigrants to the United States.

Roll call.

I. The arrival and inspection of the immigrants.

II. Their effect on our country.

III. The problem of educating the children of the immigrants.

I. The immigrants are pouring into our country by the thousands every day. On one day a few weeks ago over eighteen thousand entered the New York harbor. All of these had to be closely examined to see that no insane person, idiot, or pauper, or any one with any contagious disease should come into our country. The immigrants are all examined at one office on Ellis Island which is not adequate for examining more than five thousand a day, and when the number exceeds this the homeseekers have to remain on the ship until the officers can inspect them. Many humorous and pathetic stories about these poor homeless people are current, and if the writer of this paper knows any, they will liven up her article.

II. The next subject is one which is being discussed widely and earnestly. A great influx of people, such as come into our harbors daily, can not but have its effect. Many think that as these people have a lower standard of

U.M.C.

METALLIC CARTRIDGES

If you are a good shot you deserve U.M.C. cartridges—if you are a poor shot, you need them. They are wonderfully accurate and always reliable.

U.M.C. cartridges are guaranteed, also standard arms when U.M.C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.
Agents—13 Broadway, New York

Mrs. GEORGE W. TINCHER,
Secretary West Side Forestry Club

living than our working people, and so will work for less wages, the result will be a lowering of the American standard of living. Another fear is that they will undermine the strength of our nation, for they soon acquire as much power by vote as any educated and thoughtful citizen. This topic is a much used but none the less interesting question for debate, and if two or four members would write on it, half taking the negative and half the affirmative, more points would probably be brought out and it would lend variety to the program.

III. The problem of educating the children of these immigrants is a puzzling one. The parents, as a rule, do not wish their children to attend school, but prefer that they should either beg or work, and both parents and children rebel against the truant law. When they are thus forced into the school from families where self-control and honor are seldom taught, they make it hard for the teacher. Having so many different nationalities under one instructor adds to the difficulties. Material for this program is so plentiful in magazines and papers that the writers should have no difficulty in preparing interesting and instructive papers.

Forestry Club's Visit to Manhattan.

The West Side Forestry Club had a very delightful visit on Thursday, April 26, to the State Agricultural College at Manhattan, Kans. The club has been planning for this trip for some time, and the members who were unable to attend missed one of the most instructive meetings since its organization.

About eighteen of the club members went up on an early morning Union Pacific train. The trip of fifty miles up the Kansas River valley along which the orchards were in full bloom will be long remembered. The visitors were met at the station in Manhattan by a number of the faculty of the college, also by women from the Domestic Science and Tuesday Afternoon Clubs, of Manhattan, who assisted in entertaining them during the day. Carriages were furnished by the Commercial Club, which were at the disposal of the visitors all day. The first point of interest was the Domestic Science building where specimens of the year's work in the sewing department were seen. Later, the visitors were shown the kitchen, where the senior girls were preparing luncheon, most of the cooking being done by electricity. President E. R. Nichols and wife and Prof. E. A. Popenoe, together with other members of the faculty, entertained them at luncheon, which was daintily served by the girls of the senior class. Many of the guests said they never saw a luncheon more artistically served. This was a compliment to Prof. Henrietta Calvin, the instructress. Several departments were visited. In the forestry classroom Professor Popenoe, of the forestry department, explained to them about the original plans of the college campus. These plans were the work of Mr. Currey, of St. Louis. It has been the practice of the faculty to carry out the ideas of the original plan, so far as is practicable, in all later improvements and additions. Prof. Albert Dickens, of the horticultural department, then conducted the ladies in a walk through the campus, showing them the different trees and shrubs, explaining their habits, secrets of their culture, etc. The walk continued through the orchard where the trees were in blossom. One of the most beautiful spots on the campus was the long hedges of lilacs, which were in full bloom. The Professor invited the ladies to help themselves, an opportunity which they accepted.

The carriages called for them after their jaunt and they visited the stockyards, where they saw horses, cattle, sheep, hogs, and chickens of the finest breeds. Then they were taken to the large greenhouse where each lady was presented with a carnation. From there they went to the college library and museum, Science Hall, and other buildings. This concluded the afternoon visit to the college. Then the visitors were taken back to Manhattan, where an invitation was extended to them by E. H. Greely, Mrs. J. T. Willard, of the Domestic Science Club, Mr. F. W. McGarrett, and Mrs. O. H. Halstead, of the Tuesday Afternoon Club, to visit the Carnegie Library, where they spent the remaining hour of the day before returning to their homes. The invitation was extended to the West Side Forestry Club by the college faculty, because of its interest in forestry and gardening.

Mrs. GEORGE W. TINCHER,

Secretary West Side Forestry Club

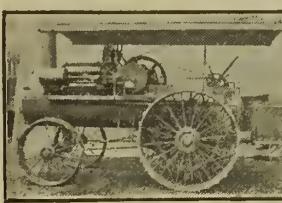
SIMPSON EDDYSTONE BLACK & WHITES PRINTS

cover the widest range of desirable patterns, from neat pin-stripes, polka-dots and plaids to elaborate figures in dignified effects. Fast color and superior quality, insuring durable dresses.

Ask your dealer for Simpson-Eddystone Black & Whites.

Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



The Lowell Manufacturing Co.

SALINA, KANSAS

Leather and rubber belting and thrasher supplies of every description. We have for sale at a bargain ten second-hand thrashing outfits, many of them as good as new. Long distance phone 432. Mention Kansas Farmer when you write.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:

Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

G. D. Stricker.

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

Only \$38 THE GREATEST BARGAIN ON EARTH KEEPS OUR COMPETITORS AWAKE NIGHTS TO TELL HOW WE DO IT.

DESCRIPTION—Selected second growth hickory wheels and gears; Norway iron clips and bolts; Inch axle double collars, full length body loops, long body, any width. Solid spring bellowsback; sanitary spring cushions. Trimmed in dark green, tan or maroon leather, cloth or plush. Ideal spring cross bar in place of wooden cross bar if preferred. All wool top lining, leather quarters and back stays, curved top joints if desired, complete with storm apron, side curtains, boot and full length carpet. Nickel dash rail, hand rail and lazy back rail. Send for Big Free Catalogue of Vehicles and Harness in colors. A buggy factory selling direct must pay off all their expenses, salaries, etc., out of a few thousand buggies. Our expenses are all paid out of our agricultural implement factory. A buggy factory would starve to death on the small profit we get on a buggy. Write us before buying. The only plow factory in the world selling direct to the consumer at wholesale prices.

HAPGOOD PLOW COMPANY, 804 FRONT ST., ALTON, ILL.

Insure Your Crops Early With

The Grain Growers Hail Insurance Co.

Of Topeka, Kansas.

The cost is the same whether you take out hail insurance early or late in the season. Why not let our agent write it early and take advantage of all the protection your premium will pay for? Hail Insurance is more of a necessity than fire insurance; by being very careful you may avoid a fire, but you cannot be careful enough to avoid a hail storm when it comes your way. In twenty minutes you may have the work and care of months destroyed. In 1905 the farmers of Kansas lost over sixty times as much by hail as they did by fire.

This is the only hail company in Kansas whose applications take effect as soon as you settle with the agent.

This is the only hail company in Kansas that does not ask the farmer to pay five per cent of his own loss.

This is the only hail company in Kansas that adjusts all legitimate claims, no matter how small. Since the cash hail line went into effect.

ALL POLICIES GUARANTEED BY LEGAL RESERVE.

OFFICERS UNDER \$50,000 BOND TO THE STATE OF KANSAS.

Methods always open for inspection. Rates low. Write Home Office, Columbian Building, Topeka, Kan., for particulars regarding our new plan.

Farmers and Insurance Men Wanted All Over the State as Agents.

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grass, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrass; millets; southern grasses; redtop and orchard grass; bromo grasses; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application in grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation it was used as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

Illustrated. Ex7 inches. 218 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA.

101

KANSAS

Kansas Politics.

(Continued from page 506.)

lation, extent of territory, wealth, and intelligent citizenship, these Territories abundantly meet all the requirements of Statehood. Every consideration of justice towards the 1,500,000 people residing within their boundaries demands the immediate admission of the Territories into the Union. We hereby request all our Representatives in the Congress of the United States to use their best efforts to accomplish this much-desired result at the present session of Congress.

The foundation of good Government is the will of the majority, fairly expressed and honestly recorded. To that end the selection of a candidate is as important as his election and the primaries should be as sacred as the polls. We demand that every safeguard that now surrounds the general election shall be established for the primaries where candidates are selected, and such additional provisions as shall preserve to each party control by its own members, freedom of choice, and an honest record of the results.

Whereas, the Supreme Court of the State of Kansas, and the Supreme Court of the United States have held the anti-trust laws of Kansas constitutional, and said laws have been demonstrated to be efficient for the punishment of offenses, we demand that said laws shall be rigorously enforced by the Attorney General and every county attorney of this State, and we demand that the Legislature shall make liberal and sufficient appropriations to conduct investigations and prosecutions against all trusts and combinations in restraint of trade, to the end that such unlawful combination may receive such exposure, prosecution, and punishment as their enormities deserve. The Republican party stands for the supremacy of law and demands of the executive, prosecuting, and police officers the rigid enforcement of all laws, regardless of personal opinions as to their wisdom or expediency."

THE DEMOCRATIC NOMINATIONS.

Governor—Wm. A. Harris, Leavenworth County.

Lieutenant Governor—Hugh P. Farrelly, Neosho County.

Secretary of State—Hugh C. Ahlbom, Smith County.

State Auditor—W. F. Bowman, Atchison County.

State Treasurer—Patrick Gorman, Bourbon County.

Attorney General—David Overmyer, Shawnee County.

State Superintendent of Public Instruction—A. B. Carney, Cloud County. Railroad Commissioners—Harry McMillan, Ottawa County; C. A. Cooper, Rice County; Jas. Humphrey, Geary County.

Insurance Commissioner—J. W. Morphew, Russell County.

State Printer—W. F. Feder, Barton County.

Associate Justices (for six-year term)—A. M. Jackson, Cowley County; D. M. Dale, Sedgwick County; (for four-year term)—W. S. Glass, Marshall County; Lorenz Hawn, Leavenworth County.

THE DEMOCRATIC PLATFORM.

We indorse and reaffirm the Democratic National platforms of 1896, 1900, and 1904, as presenting in unbroken succession the principles of the Democratic party of the United States.

We adhere to the great Democratic doctrine of equal rights for all and special privileges for none, and we once more declare that the true end of all good government is the greatest good to the greatest number.

Cherishing the Constitution as the supreme law, we declare that wherever

that immortal document declares or suggests the policy of our Government, we make it our guide. We stand for constitutional money, for constitutional taxation, for constitutional control of interstate and foreign commerce, and for a constitutional foreign policy; at the same time favoring all such changes in the Constitution as may from time to time become necessary for the protection and preservation of the rights of the people.

Time and events have justified every contention and fulfilled every prophecy of the Democratic party.

We congratulate the Democratic party and the country upon the triumphant vindication of the quantitative theory of finance, a Democratic doctrine; and urge upon the benefits of an expanded currency, a Democratic demand.

We remind the public of the fact that the late President McKinley was preparing to abandon, if he had not actually abandoned, the extreme doctrine of protection; that the present occupant of the White House has made so much progress in the knowledge of the truth as to declare that "the tariff is not sacred," and that the most intellectual and conscientious elements of the Republican party now agree with the Democracy that the tariff is a shelter for trusts, enabling the tariff barons to collect enormous tribute from the American people, while selling the same wares to foreigners at a much lower rate it gives the lie to the pretense that such protection is necessary, and constitutes a crime against the American people. We, therefore, renew our oft-repeated demand that all tariff legislation be restricted to laying duties for revenue only.

Railways are public highways. Railway companies are common carriers and public servants. They are given franchises and great powers, with the implied agreement on their part that they will serve the public impartially for just compensation. This they should be required by law and compelled by public authority to do.

We declare that we are not enemies, but friends, of the railroad companies. We are proud of their efficiency as mediums of transportation, and rejoice in their mechanical and scientific development, and their improved facilities for the transportation of persons and property; and we pledge ourselves to defend their every right and redress their every wrong. Yet, we can not shut our eyes to plain facts nor submit to the rules of the State and Nation by railroad influence. We, therefore, demand of the Board of Railroad Commissioners an honest and earnest enforcement of all provisions of existing laws against rebates and all manner of discriminations; and of the Legislature, intelligent, fair supplementary legislation to the end that both the railroads and the public may have justice.

Of all the evils of railroad discrimination, none are so insidious, so constant, and so powerful for evil as the free and complimentary pass. It muzzles the press, silences discussion, stifles and perverts legislation, corrupts justice, dominates and directs public conventional opinion, determines business and social success, and, in a great measure, controls public affairs. In principle, it is as unjust as unequal taxation, and in practice, much more unjust; and it is affiliated with every other economic evil of the age. It is estimated that more than one-third of the passenger mileage upon railroads in Kansas is now free, so that at the rate of 3 cents per mile the railroads now realize upon their total mileage less than 2 cents per mile. We, therefore, demand the immediate abolition of the free pass, and all other like devices, and the establishment of a passenger rate of 2 cents per mile for adults, with proportionate reductions for children, as now.

The subject of the trusts has become stale, but these criminal combinations are not only still with us, but they rule the markets as with a rod of iron. The price of every staple is arbitrarily fixed in utter defiance of the law of the land. And this will go on until the prisons that are yawning for the high-grown scoundrels, who manage the trusts, are filled with them and they are arrayed in the branded garb of felons.

To every honorably discharged sailor and soldier of the Republic we owe a debt of gratitude which we can never repay. They, especially the survivors of the great Civil War, were promised honors and offices, lands, bounties, and pensions; and it behoves a patriotic and honorable people to faithfully perform the pledges made. And as the remorseless reaper thins their ranks and their influence in affairs is dimin-

ished, the obligation resting upon us is increased. We pledge the candidates on the Democratic ticket a rigid enforcement of the old soldier preference law.

Prohibition in Kansas has reached the stage of chronic malady. For years the Republican politicians have dealt deceitfully with the people respecting this question. The party, being hopelessly divided along the line that divides wet from dry, and realizing that the votes of both factions are necessary to constitute a partisan majority, they have deliberately attempted to fool, and have generally succeeded in fooling both; putting wet candidates on dry platforms, assuring the drys that the law would be vigorously enforced, while whispering and winking at the wets, supplying and plying them with free liquors on the eve of elections, and wholly ceasing to prosecute on the near approach of elections, making spasmodic spurts of prosecution between elections, and at all times extending immunity to favorites in the liquor trade, thus playing fast and loose and blowing hot and cold; each faction being made to believe that it was getting the best of the other in this game of duplicity, hypocrisy, falsehood, and deception, and each joining hands with the other until the political union for base partisan purposes of the wet with the dry, of the saint with the sinner, of the temperance-howler with the liquor-seller, of "the puritan" with the black-leg, has become a fixed condition against which it is impossible for honest men longer to contend.

It was in the year 1883 and under the first Democratic administration this State has ever had, that of Hon. George W. Glick, that the law was enacted reducing passenger fares on railroads to a maximum of 3 cents per mile, and the first railroad commission was then created by law, and we pledge our candidates for Railroad Commissioners to take such action as may be warranted by existing conditions. In these days of corporate encroachment and of evasion and defiance of the law by the laws' corporate creations, we deem it wise to make plain the attitude of democracy towards this situation by declaring that we are, as our party has always been, in favor of the enforcement of all laws, particularly those enactments passed to circumscribe and control the exercise of corporate power, and for such new legislation as may be necessary to make such the supremacy of the people's law over all its subjects, both natural and artificial.

We make no war upon material prosperity nor the beneficiaries thereof, so long as they recognize the dominion of the people's Government, but we do declare for the rigid, rigorous, faithful, and efficient exercise of Governmental powers to the end that the dominion of the mighty over the many shall cease, and that the feeble as well as the forceful, the poor as well as the powerful, shall be equal before the law.

We declare in favor of the initiative and referendum to the end that local self-government may be realized and the Government brought close to the people in all matters of importance.

Wherever there is a gross disparity between the assessed taxable valuations of railroad, telephone, and telegraph properties and private properties, we specifically insist upon the property of railroads, telephones, and telegraph corporations in Kansas paying its fair proportion of the burden of public expenses.

We insist that it is not only the duty of the individual, but of the official as well to obey the law. We demand the enforcement of all laws, not only those prohibiting the sale of intoxicating liquors, but the law making it a felony to commit larceny from the State Treasury and all other laws on the State statute books, and we demand that the law requiring the Governor to inspect and count the funds in the State Treasury, and report its condition, be complied with.

At the State Agricultural College.

Professor Eyer, of the electrical engineering department of the Kansas State Agricultural College, is making a test of gasoline engines to determine their availability for electric lighting as well as various mechanical purposes of the farm or business establishments. In a recent test a two-horsepower engine ran eighteen electric lights for ten hours without any attention.

Over twenty varieties of corn are being planted at the Hays Branch Experiment Station this year with a view to finding the varieties best adapted for Western Kansas. It is felt that with more care in selecting for seed, and with better cultivation, it will be possible to greatly improve the corn crops in the western part of the State, not

Buy Dodd & Struthers' Lightning Rods

HERE has been a good deal of discussion as to the real merits of a Lightning Rod, and authorities have all decided that Dodd & Struthers' Pure Copper Cable Rod would absolutely protect any building upon which it is placed in a scientific manner, and they have agreed that the system of placing the rods on has as much to do with the efficiency of the rod as does the rod itself.

This fact partly accounts for the phenomenal growth of our business in the last few years, as the system we are using is given a great deal of thought. Professor Dodd, who is known throughout the entire country, gives his entire attention to the scientific part of our Lightning Rod business. He gives each of our salesmen instructions in properly rodding buildings. These salesmen in turn instruct our local dealers, so that in buying a Lightning Rod of one of our authorized agents you run absolutely no risk, as each man is schooled in the business and is thoroughly competent to put on Lightning Rods before we allow him to issue our guarantee.

By this guarantee we mean that when he rods your buildings our agent furnishes you a written agreement whereby we say that if you ever have a dollar's worth of damage to your buildings while our rods are on them that we will refund you the money paid for the rods or make good the damage.

Professor Dodd has appeared before every National Mutual Fire Insurance Convention for the last six years and has received many endorsements from them, recommending the firm of Dodd & Struthers and their Pure Copper Cable Lightning Rod.

No other Lightning Rod Firm has the backing of the farm papers like Dodd & Struthers.

At the World's Fair at St. Louis the superior jury awarded Dodd & Struthers the Highest Award, where our rods were in competition with those from five different nations.

There are many imitations of Dodd & Struthers' Rods on the market. Many little concerns are bobbing up trying to sell a cable that looks like the genuine Dodd & Struthers, but as a rule people can not be fooled. They will not accept the substitute, as they know the genuine article is better than any substitute made.

When you are considering the Lightning Rod Proposition, be sure that you have read our booklet, "Laws and Nature of Lightning, and How to Control It," before you decide the matter. If you do not have one of these booklets, write us and we will mail it to you free of charge. When you buy a Lightning Rod be sure the spool is marked with our registered trade mark, D. & S., and the man who puts them on for you has our agent's certificate, and also be sure that you get a guarantee when the job is finished.

Do not accept a substitute.

DODD & STRUTHERS
DES MOINES, IOWA

KANSAS WESLEYAN
Business College

YOUNG MEN AND YOUNG WOMEN Here is a school in its own home, cost \$49,000. Steam heat, electric lights thoroughly modern equipment. Our Employment Bureau places all competent graduates. We send stenographers, bookkeepers, and commercial teachers to all parts of the world. Business, Stenographic, preparatory, Civil Service and Special Penitentiary. Tuition low, good board cheap, advantages unsurpassed. Special summer rates. Write Kansas Farmer for particulars. T. W. Ranch, Supt., Box D, Salina, Kan.

GOLD GOLD GOLD

Investors who wish large profits should write for prospectus of the Hazel Mine Company at Building No. 1, located on the same vein with Original Baldron Mine, which produced \$70,000 from 20 tons of ore. Active development work now progressing. Railroads, cheap smelting, 52 acres best mineral land. Treasury stock offered at 25 cents per share for development work only. Don't miss this chance to make money, write to Fiscal Agents, 1735 Curtis St., Denver, Col.

MIXED FARMING
Wheat Raising
Ranching
Three great pursuits have again shown wonderful results on the
FREE
HOMESTEAD LANDS
of
WESTERN CANADA

Magnificent Climate—Farmers plowing in their shirt sleeves in the middle of November.
"All are bound to be more than pleased with the final results of the past season's harvests."—Extract.
Coal, wood, water, hay in abundance—schools, churches, markets convenient. This is the era of \$1.00 wheat.
Apply for information to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent.

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Meet me this paper.

THE KANSAS FARMER

meeting the yields of Eastern Kansas, but getting enough to make it profitable to have a small acreage of early-maturing corn.

Only thirty-six Kansas counties have not had farmers' institutes this year. The Agricultural College will be glad to aid in reducing this number. Requests have come from many of these counties, but it has not been possible to reach them all this year. The counties in which institutes have not been held this year are: Geary, Wabaunsee, Wyandotte, Woodson, Neosho, Montgomery, Wilson, Chautauqua, Sedgewick, Barber, Pratt, Stafford, Barton, Kiowa, Comanche, Pawnee, Hodgeman, Ford, Clark, Meade, Gray, Lane, Finney, Haskell, Seward, Stevens, Grant, Kearny, Hamilton, Stanton, Morton, Rawlins, Cheyenne, Thomas, and Sherman.

Prof. E. A. Popenoe has begun to plan an energetic campaign against the San Jose scale, found recently on many fruit-trees in and around Dodge City. The Agricultural College and Experiment Station Council has authorized Professor Popenoe to give great attention to the trees about Dodge City, and also to visit many other localities in the State to see if this most dangerous pest is at work elsewhere. He will go to Dodge City next week with spraying machinery and materials to see if comparatively mild remedies will succeed in killing the young scale now appearing, without injuring the trees. More drastic remedies will have to be applied next winter when the leaves are off. When trees are badly infested he recommends cutting the trees down and burning them, root and branch.

The Kansas Agricultural College and Summer Picnics.

The college believes in summer picnics, and has for many years been responding favorably to most calls made upon it for speakers for picnics, summer institutes, old settlers' meetings, etc. Much of the service contributed by the college has been helpful to the cause of agriculture, but for the most part it has had little value because the educational and the amusement features were not kept distinct and separate, the amusements taking the whole time and rendering public speaking almost impossible and valueless because not heard. When institutes are held in the fall or winter, there is not much need of combining the institute and picnic unless special effort be made to reach the young people.

This year, therefore, the college will be disposed to decline invitations to send speakers to summer meetings unless the educational and amusement features be treated exactly alike. It does not tend to raise the dignity of agriculture in the minds of young people to let the merry-go-round and striking-machine and the lemonade-sellers work in opposition to a lecture on agriculture. Don't cut out the amusement feature by any means. The college believes in picnics for the young people with lots of fun, but it also believes that the young people ought to hear lectures on scientific agriculture. Give each its own share of time, and make contracts with all who furnish amusements and refreshments with a definite understanding as to their share of the time.

Let these features begin as early as the managers desire, but have them stop absolutely from 10:30 to 11:30 a. m. for the educational program. Then they should have all the time from 11:30 to 2:30, when they should stop again for one hour. The young people, and the old folks too, are thus given ample time for the social side of the day, and all should be urged to attend the lectures. Then the speakers, whether from the college or elsewhere, should prepare lectures that would interest the young people in life on the farm. The managers of these picnics usually fail to have enough seats for the crowd. They say, "The people won't sit down to listen to a lecture." Then don't have a lecture. But if you do have a lecture, prepare enough seats and make it possible for the lecturer to be heard, and assume that all your people want to hear and then insist on good order. Then be prompt. Treat the amusement managers and the young people fairly, and begin the educational part of your program exactly on time, giving five minutes' warning by proclamation. Dismiss this part of the program on time even if you have to ask the field-marshall to arrest the speaker and take him off the platform.

The college is willing to help, but the picnic people should give the cause of agriculture its proper place and a "square deal." Correspondence re-

tive to all summer meetings is now in order. J. H. MILLER, Field Sec., Kansas State Agricultural College, Manhattan, Kans., April 30, 1906.

The Agricultural College Y. M. C. A. Building Fund.

The following letter was received by General Secretary McLean recently:

"Mr. W. W. McLean,
General Secretary, Y. M. C. A.,
Manhattan, Kans."

"Dear Mr. McLean:—Your favor referring to the Y. M. C. A. at the Agricultural College duly received. I take pleasure in handing you, herewith, my personal check for \$100 on this account. I regard the Y. M. C. A. as one of the greatest and most valuable institutions that has ever been organized in the interests of the young men of our State and Nation. It improves the mental, moral, spiritual, and physical condition of men, and reaches all classes. I have never been associated in any way with any work which was so interesting and attractive to me as the Y. M. C. A. Yours very respectfully,

W. R. STUBBS."

The following contributions have been made:

Previously acknowledged....	\$22,935.00
F. A. Prague, Clafin, Kans....	5.00
Niels Peterson, Quenemo, Kas....	1.00
C. D. Hickok, Ulysses.....	2.50
Perry Edwards, Emporia.....	2.00
F. P. Dickinson, Ottawa.....	1.00
Chas. Black, Ash Valley.....	1.00
Z. Moorman, Burr Oak.....	2.00
Mrs. A. A. Swanson, Axtell....	1.00
Riley Hardware Co., Soldier..	2.50
C. A. Kocher, Coats.....	1.00
Total.	\$22,954.00

Hail Insurance.

If you raise any kind of small grain you are probably interested in having it protected from hail by some good company. The Grain Growers' Hail Insurance Company, with headquarters in Topeka, Kans., is offering a strong mutual policy again this year at its very reasonable rates. Every policy is guaranteed by a deposit of the legal reserve in some bank or banks, designated by the State of Kansas. The rates are based upon what it has actually cost the company to carry the risks in each county for the last five years. This and other new features, makes "The Grain Growers" the strongest company writing this class of business in the State. If you want the best hail insurance at the lowest possible rate that will carry the business, write The Grain Growers' Hail Insurance Company, of Topeka, Kans.

Gopher Exterminator Put to a Successful Test.

The Lincoln Republican has this to say about a new and much-needed invention which is now advertised in THE KANSAS FARMER:

Flint Saunders, as previously announced, was in town last Saturday afternoon, and in the presence of about fifty men, demonstrated that his exterminator is all that he claims for it. Armed with an exterminator apparatus, a spade, a piece of plate glass, and a gunny sack containing a cat, he went out to a gopher-infested field in the east part of town, where by the use of the endgate rod to a lumber wagon, he located a runway of the gophers at two points about fifty feet apart. At one of these points he dug a hole large enough to contain the cat, which he placed in the hole and covered with the glass; at the other end he applied the exterminator.

"At the end of one minute, the cat had become so thoroughly infected with the poisonous matter, that those witnessing the test were satisfied that it would die even if removed from the pit to air. It, however, was allowed to remain four minutes longer under the glass, when it was practically dead. The cat was then removed and a lighted match applied to the open end of the gopher runway. An explosion immediately followed, throwing dirt from the place where the apparatus had been applied, also from points some thirty feet more remote where the operator had been trying to locate the runway, showing that the gas had thoroughly circulated through the connecting gopher passages in the vicinity where the apparatus had been used.

"The test was a very successful one. The farmers who saw it and have gopher-infested fields of their own were greatly pleased with the result and will not be slow in making use of the invention to save their meadows. And as for Mr. Saunders, if he uses only ordinary energy in pushing the thing, he has a fortune within his grasp."



OLDS Engines

There is no gas engine as simple as Olds—compare it with others and this statement is proved. The repairs cost practically nothing. Every adjustment is very simple to make. Exact duplicate of any part can be furnished at once, perfectly machined and ready to put on. This is important in case of accident.

The Most Economical Engine

For threshing, sawing wood, churning, feed grinding, pumping, running cream-separator, etc. The reason why is interestingly told in our catalogue mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalogue showing Type A (2-8 h. p.), Type G (8-50 h. p.), Types K and N (12-1200 h. p.) used with our Gas Producer it will reduce fuel cost 75 per cent.)

Celebrated Picture Free

For 4c in stamps to pay cost of mailing we will also send you Rosa Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16 x 20, beautifully colored, suitable for framing.

OLDS GAS POWER WORKS, Lansing, Mich.

(formerly OLDS GASOLINE ENGINE WORKS)

20 Chestnut Street

California Opportunities.

EDITOR KANSAS FARMER:—As I am hearing and seeing daily accounts which are being printed throughout your country by sensational newspapers of disasters which they intimate occurred throughout the State of California, I think it may be well to inform you that the city of Fresno, in common with by far the greater portion of the State, is absolutely unaffected by the disaster which befell San Francisco and, to a limited extent, the smaller cities near the Bay.

There has been absolutely no damage done here by the earthquake, in fact, the damage done in San Francisco by the earthquake was small compared with the result of the terrible conflagration, which was of course directly traceable to the earthquake's breaking the mains and the electric light wires.

The writer had the pleasure of being in San Francisco, in charge of the first relief train to reach that city, and found a marvelous condition of affairs existing; great order prevailed and suffering and destitution were relieved in an incredibly short time.

In Golden Gate Park, where 125,000 refugees were camped the night after the fire, relief conditions were so well in hand that one week after the calamity only 6,000 remained in the emergency camps, 119,000 having been shipped to nearby towns or distant homes. A similar condition existed in other refugee camps.

The future of California was never brighter than at present. While business was practically suspended for a week because of the necessity of sending immediate relief and assistance to San Francisco, the normal peace and health of the city was more than maintained. In the majority of cases the modern structures were undamaged by the earthquake, and San Francisco has already begun to restore to their original condition nearly all of the steel frame buildings which were burned out.

San Francisco, aside from the loss of life, which is much smaller than the papers have stated, being less than 300, will be greatly benefited, and not only that city but the entire State. Plans are practically matured for reconstruction of San Francisco on a broader and more artistic scale, and the old wooden buildings of pioneer days will be replaced by new and modern structures, which will make San Francisco the greatest city of our country.

The sturdy manhood of California, descendants from those pioneers who crossed the plains in 1850, is asserting itself in a manner to command the admiration of the world; by battling with this greatest disaster of modern times and taking hold of the reconstruction of the city in such a manner as to insure prosperity for all.

The action of the banks and insurance companies is making available large amounts of money for the reconstruction of San Francisco. There will be over \$200,000,000 spent in reconstruction work. This money will go to the artisans and skilled mechanics, who in turn will want food, clothing, garden truck, and hay for their teams. This will cause a great demand upon the farmers, and therefore all farm products will find a ready cash market.

The future of California is brighter than ever before. No national calamity or stringency of the money market can affect it as it will take at least ten years to rebuild San Francisco, and during that time the farmer will be one of the first to benefit by the condition. This universal condition, combined with the sunny skies and mild climate of California, causes me to invite you and your friends to come to California.

We want men here—men of brains and courage, who will profit by the greatest opportunity the State has ever known. There is room for you all. Most of the cowards have run away. The drone is not wanted, but the man with good, rich blood in his veins and courage in his heart will find in California to-day a greater opportunity than existed even in the "days of '49," in the "days of gold."

Fresno, Cal. A. A. MARTIN.

\$15 to St. Paul and Minneapolis and Return.

From Kansas City via Chicago Great Western Railway. Tickets on sale June 1 to September 30. Final return limit October 31. Equally low rates to other points in Minnesota, North Dakota,

A Home For Half the Money

In the Pacific Northwest. A handsomely illustrated 88-page book.

"OREGON WASHINGTON IDAHO AND THEIR RESOURCES"

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig, ROOM 212 WORCESTER BLDG., PORTLAND, OREGON.

The Kansas State

Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANS.

A Great Fountain Pen Offer

Our best \$1 fountain pen and the Kansas Farmer one year, both prepaid \$1.50

Our best \$1.50 fountain pen and the Kansas Farmer one year, both \$2.00 prepaid

Our best \$3 fountain pen and the Kansas Farmer one year, both \$3.00 prepaid

Fitted with solid gold pens, will last 15 years. All pens guaranteed. Our stock is the largest west of Chicago. We refer you to any bank in Topeka or the Kansas Farmer

M. L. Zercher Book and Stationery Co.
Topeka, Kansas

PURE BREED White Wyandotte eggs for sale, \$1.00 for 15. Mrs. C. E. Williams, Topeka, Kans.

Wisconsin, and Lower Michigan. For further information apply to Geo. W. Lincoln, T. P. A., 7 West 8th St., Kansas City, Mo.

Dairy Interests

The Production and Care of Pure Milk.
OSCAR ERF, PROFESSOR OF DAIRY HUSBANDRY, KANSAS STATE AGRICULTURAL COLLEGE.

Milk is probably more universally used by people of all ages and classes the world over than any other human food. It is also true that no other food of such large consumption is handled so extensively under unsanitary conditions. Milk is a pure product when it comes from the milk gland or follicle of a healthy cow, but there are many chances for it to become contaminated before it is used.

There are certain fundamentals which should be observed in producing pure milk that are almost entirely overlooked on most of the farms where milk is produced. While these fundamentals are known in some cases, it is, however, true that there is a lack of appreciation of the importance of these principles. The dangers that are accompanied with the slovenly way of producing milk are not fully realized until the individual comes in direct contact with some experience.

DEFINITION OF PURE MILK.

The meaning of "pure milk" is simply milk having a normal chemical composition, free from all unnecessary contamination. In order to comply with this requirement, certain factors must be taken into consideration. Any person suffering from any contagious disease or any person who has been exposed to a contagious disease should stay away from the cows and from the milk. Diseases are very readily transmitted from one person to another by means of direct milk-consumption. For instance, a man goes to see his neighbor who is affected with tuberculosis or consumption. Upon leaving the consumptive person his clothes may be more or less infected and the germs may be conveyed to the cows during the time of feeding or milking. It has been reported that consumptives feeding and tending cows have infected whole herds of cows with tuberculosis.

The health of the cow is another very essential thing to consider. In order to produce pure milk a cow must be free from tuberculosis or any other disease that will contaminate milk. A herd should be examined and tested at least twice a year by a skilled veterinarian, and if there is any animal that is suspected of being in bad health she should be promptly removed from the herd and the milk rejected.

TUBERCULOSIS.

Much has been said within recent years in regard to the infectious qualities of bovine tuberculosis on the human being. While a great many experiments have been carried on to decide this matter, it has been quite positively demonstrated that bovine tuberculosis can be transmitted to the human being by the use of milk from tuberculous animals. Although this does not occur directly, it has been and is accomplished indirectly.

Theoretically, these germs, it seems, must first adapt themselves to the conditions in which they exist, and it requires several generations for them to grow and thrive well. Since germ life changes so rapidly, the passing of a few generations will not require more than 24 to 48 hours. It can be readily seen that germs can adapt themselves ultimately to the human body and transmit tuberculosis. Therefore, it is a safeguard to the consumer to have his cows tested frequently to prevent any spread of these diseases.

HOW TO DETECT TUBERCULOSIS.

The proper way to detect tuberculosis in cattle is by means of the tuberculin test, which is considered reliable if applied by one who has a thorough knowledge of cattle. This is very important for the reason that animals in the last stages of tuberculosis do not always respond to the test. While they may still be in good flesh, they are at the same time in a condition to

spread the disease through the entire herd.

Causes.—Tuberculosis in cattle is chiefly caused by poor feed, impure water, bad ventilation, improper drainage, and lack of sunlight. Infection, abortion, detention of the afterbirth, and catarrh of discharge from the generative organs all tend to reduce the vitality of the animal, which brings on the proper condition for infection.

Remedies.—Since tuberculosis is an infectious disease, the only thing left for the dairyman and stock-raiser to do is to guard against it. This can be done by keeping every cow, heifer, bull, and calf in the best of condition. If any cow should begin to all or should lose her calf, she should receive proper treatment, and the stable should be properly disinfected with a good germ-destroying agent. A cow that has retained an afterbirth should receive such aid as will enable her to discharge the afterbirth, and the generative organs should be washed out by an antiseptic which will prevent infection. The average dairyman should be anxious to rid his herd of infectious diseases of every nature, not only for his own personal benefit, but for the benefit of his patrons.

STABLES.

One of the great essentials is the proper kind of a stable. Such a stable need not be of an elaborate type, nor need it be expensive. The stable should comply with the following conditions: It should have a room where the dairy-cattle can be kept by themselves. It should be well ventilated and well drained. If the stable is constructed with stalls, the floors should be tight and the walls plain. If the stable is of the covered-yard type, it should be well bedded at least once a day, and preferably twice a day. Bedding material should not be musty or dirty.

It is of great advantage to use land plaster in the manure-gutters of stables or over the manure in the covered yard. Once or twice a year the stable should be whitewashed.

FEEDS.

Feed good, clean feed. The central part of the United States is especially blessed with good dairy feeds. Nothing has proven so cheap and so effective for milk-production with the average cow as alfalfa hay and corn. Eighteen pounds of alfalfa hay and eight pounds of corn has proven to be a good ration for an average dairy-cow of 1,000 pounds live weight. Depending upon the individual animal, it is advisable to feed some bran at times. If the cow is an exceptionally large producer, she must be fed a greater quantity of feed. The above amount must vary according to the milk-production of the animal.

Alfalfa Hay.—There is a great variation in the kind of alfalfa hay. Alfalfa hay should be, when fed to cows, bright in color, free from dust, and should contain many leaves. It is important to have a great percentage of leaves on alfalfa hay, for it is this part of the plant which contains the greatest amount of protein (which is the great milk-producing constituent). Experiments have proven that it takes a little less than a pound of alfalfa leaves to equal a pound of bran, while it requires one and three-fourths pounds of stemmy hay to equal the feeding value of a pound of bran. It is therefore necessary to harvest the hay in such a manner as to fully recover all the leaves. We recommend harvesting the alfalfa hay as green as possible. For instance, mow the hay in the morning and rake it up and haul it into a curing room in the afternoon. This curing room can be constructed in the same manner as a hay mow, or in a long crib-like style, boarded up on the side to prevent the rain from wetting the hay. In this case the hay is cured in the barn. Not more than four feet of green hay must be placed in this mow for one cutting, depending somewhat upon the climatic conditions and upon the dryness of the hay at the time it is put into the mow. Five feet is permissible, but great care should be taken that the hay should not be put in to a great depth for it is apt to spoil or be damaged by heating.

Covered Yard for Stabling Cows.—For the average farm-dairy we advocate the covered-yard system, with a milking stable attached. This stable complies with all the conditions necessary to produce pure milk, and is within the reach of every farmer to build.

SOME "DON'TS" ABOUT CREAM SEPARATORS

We "don't" ask you to buy a DE LAVAL machine simply because the supply can is so "low down" that the rest of the construction is entirely impractical.

We "don't" ask you to buy a DE LAVAL machine simply because it has a new "ball" top-bearing which as soon as the balls begin to wear a little must prove a source of endless trouble to you.

We "don't" ask you to pay \$34.85 for a mere combination of tin, cast iron and blue paint that will waste butter-fat every time you put milk through it and the best thing about which is that it can't last very long, and which will probably be worth \$1.85 for "scrap" when you are done with it.

DE LAVAL machines are sold upon a more serious and substantial basis. They skim clean; have big capacity; have the reserve efficiency to meet hard conditions; make the best butter; run with least strain on the operator; are simplest to handle and clean, and last three to ten times longer than any other.

We made a "low down" supply can twenty years ago. We used and abandoned the "ball" top-bearing fifteen years ago. Our supply cans today are at just the right height in proportion to the proper construction of a separator, while our "radical spring" top-bearings are not used in imitating machines simply because they cost much more than the various poorer substitutes.

And above all else DE LAVAL machines not only COST LEAST in proportion to actual capacity and actual life but what is very much more important they SAVE MOST, while if any buyer is unable to take advantage of the cash discount he can buy one on such liberal terms that it will actually pay for itself out of its own savings.

A DE LAVAL catalogue that explains all of these things is to be had for the asking.

The De Laval Separator Co.

RANDOLPH & CANAL STS., CHICAGO.

1213 FILBERT STREET, PHILADELPHIA. 74 CORTLANDT STREET

9 & 11 DRUMM STREET, SAN FRANCISCO.

General Offices:

109-113 YOUVILLE SQUARE, MONTREAL.

75 & 77 YORK STREET, TORONTO.

14 & 16 PRINCESS STREET WINNIPEG.

A large acreage of alfalfa would require considerable expense on the part of the average farmer to build such a curing barn. For this reason we suggest a shed 28 feet long by 16 feet wide, built with a portable roof so as to allow the roof to rest upon the hay and shed the water while it is curing. the water while it is curing.

WATER.

Provide water in abundance, easy of access, and always pure, fresh, and not too cold. Water pumped directly from the well in winter as well as in summer will give the best result. This can easily be done by means of a gasoline engine or a bull-tread power. It is not advisable to use large storage-tanks or large, open water-tanks or troughs. Salt should be accessible at all times.

FEEDING.

Dry hay or fodder should never be fed while milking, or even in the same room while milking. If necessary, sprinkle the feed before it is fed. For all practical conditions it is advisable to have a separate milking stable in which the concentrates are fed, but no dry feed. This milking stable can be cleaned easily and thoroughly aired before milking, and in hot weather the floor can be sprinkled to prevent the raising of dust.

It is not advisable to suddenly change the feed for dairy-cows, for there is always a tendency to produce milk of a great variation in the per cent of solids by so doing. Feed liberally, but in no case should decomposed or moldy material be fed.

COVERED YARD FOR STABLING COWS.

For the average farm-dairy we advocate the covered-yard system, with a milking stable attached. This stable complies with all the conditions necessary to produce pure milk, and is within the reach of every farmer to build.

Economy in various ways is only possible with the best arrangements in the stabling of cows. Cows must necessarily be stabled in a well-managed dairy for a greater part of the time in winter, and unless an easy and comfortable position is provided for, there will be a vast amount of fretting, which has its results in the diminution of the production of milk, and also in the loss of food. The good effect of the food of an animal is greatly inter-

Don't be Hoodwinked



Direct to You

30 Days Approval Test

Cleveland Cream Separator.

You get a fair, square deal on the only high grade machine made that is sold at a reasonable price. No Money in advance.

The Easy Running Separator.

Because:

The Cleveland is the only all ball-bearing machine made. Do you need to have us prove to you that the ball-bearing is the easiest running bearing ever made? Every other separator manufacturer would use them if he could. We can. We do. The aluminum skimming device and the fact that the Cleveland has the fewest parts of any separator made, make it the easiest to clean and the longest-lived. The fewer the parts, the less wear, the less repairs. The Cleveland is a guaranteed perfect skimmer.

Don't take our word. Try a Cleveland. It won't cost you anything. The new free catalog tells you how. Write for it. Address

The Cleveland Cream Separator Co., Dept. C, 34 Michigan Ave., N. W. Cleveland, Ohio.

Collections made in all parts of the United States
No fee charged unless collection is made

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

KANSAS

TOPEKA. Special attention given to stock-breeders account Reference furnished on application.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas

TUBULARS WRING GOLD FROM MILK

Tubular butter brings 25 to 35 cents. Cream is worth only one cent for stock food. Yet many farmers have no separator—only half skim their milk by setting—lose 24 cents on cream fed to stock—and wonder why dairying don't pay. Tubulars stop this loss.

Sharples
TUBULAR
CREAM SEPARATORS

THE SHARPLES SEPARATOR CO., WEST CHESTER, PA.
TORONTO, CAN. CHICAGO, ILL.

ferred with by every discomfort to which it is subjected. There certainly should be room enough to avoid cramping cows. With this in view we consider the covered-yard plan the best scheme. The floor should be covered every evening with a heavy coat of clean, dry straw in which the animal may recline without chafing the skin over the prominent bones, thus making rest easy and pleasant. Another advantage with this method of stablizing lies in the fact that the manure can be hauled directly from the stable to the field at such times as is permissible to drive into the field. With a heavy coating of straw it is unnecessary to remove the manure from the stable daily, as is the case with the stall plan, but only requires litter in abundance.

MILKING.

The entire body of the cow should be cleaned occasionally, but she should be cleaned daily in the region of the udder. If the hair is too long, clip this part of the body, for it makes it easier to clean the udder. The milker should be clean and neat. He should wear a clean outer garment, which is only used while milking and kept in a clean place at other times. He should wash and dry his hands just before milking. Wipe the udder with a clean, damp sponge and proceed to milk, which should be done in such a way as not to inconvenience or discomfort the cow. It should be done quickly, cleanly, and thoroughly. No unnecessary noise or unnecessary delay should be allowed. Commence milking at the same hour every morning and evening, and milk the cows in the same order. The first few streams of milk from each teat should not be milked into the pail, for this milk is very watery, is of little value, and is invariably contaminated, which will injure the rest of the milk. Milk with dry hands. Never allow the milker to moisten the hand and teat with milk. If the teats are chafed, use a small amount of vaseline. Be sure and notice that the milk is normal, not bloody or stringy or unnatural in appearance. If this is the case be sure and reject the whole mess.

SELECTING COWS.

From a business standpoint it is always wise to weigh and record the milk from each individual cow by recording and weighing a sample of the night's and morning's milk for seven consecutive days each seven weeks, and at the same time taking a sample to be tested for butter-fat. During this time it is wise to weigh the feed and estimate its value in order to see whether the class of cows that you have is making a profit or not.

TREATMENT OF MILK.

After milking remove the milk into a clean, dry milk-room, where the air is pure and sweet, and here strain the milk through a metal-sterilized gauze and a sterilized flannel cloth or a layer of cotton. (Never use flannel or cotton twice for straining.) Then aerate and cool as soon as it is strained. Milk should be cooled to 50° F. for city delivery. This will preserve the milk for several days, if handled properly. After it is cooled it should be placed in clean, sterilized milk-bottles. These bottles should be placed in a case and should be surrounded with crushed ice, after which it is ready to deliver. If milk is to be stored in cans, it should be placed in a clean, dry, cold room in tanks surrounded by cold water. As soon as it is desired to remove the cream, it should be stirred occasionally with a stirrer to prevent the cream forming a thick layer.

If the evening's and morning's milk is to be delivered at the same time, it is advisable never to mix the warm morning's milk with the cool evening's milk. However, there is no danger in mixing the two providing the morning's milk is equally low in temperature to the evening's milk. All utensils coming directly in contact with the milk should be thoroughly washed, rinsed, and sterilized with steam. If steam is not available, they should be rinsed with a solution of hot water and boracic acid and set up to dry. (See Kansas Experiment Station Bulletin No. 181.)

KEEPING QUALITY OF MILK.

When all of these steps are taken, the milk will be absolutely pure and will keep under ordinary conditions two and one-half to three days from the time it is milked. At this time, if kept at a temperature of 50° to 60° after delivery, milk should sour. If milk does not sour, it indicates abnormal milk, or perhaps some chemical or preservative has been added which has destroyed the bacterial life and has prevented souring. Frequently, milk pro-

duced under filthy conditions, which ordinarily would not remain sweet more than 18 to 24 hours, is preserved by means of preservatives. These preservatives are in a certain measure poisons which are injurious to the health and illegal to use, and some States serve a heavy penalty on the party that uses them. The only preservatives that should be taken into consideration in the production of pure milk are cleanliness and a moderately low temperature. All steps during the whole milking operation must be clean, and if one step is neglected the whole mess of milk is affected. The old saying that "A chain is no stronger than its weakest link," holds true in the production of clean milk. For instance, one can adopt all the steps herein given with the exception of putting milk into filthy bottles. With this operation all the work has been undone that was attempted by the first step.

The cities of Kansas are gradually increasing in population. There is coming to be a greater demand for good milk, and Kansas dairymen ought to be able to supply the market.

Blue-Grass Pasture for Cows.

Does a cow on good blue-grass and white-clover pasture need any grain ration while in full flow of milk?

Shawnee County. C. F. KINKEAD.

Good blue-grass pasture has no superior for milk-production. Even with the best of winter-feeding, cows will promptly increase their milk-flow when turned out on pasture of this kind.

Of the clovers, there is none better relished as a pasture crop than the small white clover. With a good blue-grass and white-clover pasture, cows will produce milk more cheaply than with any other ration which might be fed, and there is probably no need of feeding any grain unless in exceptional cases to very heavy-producing cows. The worst fault of the blue-grass is that it stops its growth during the hot, dry weather of the summer and must be supplemented by green forage-crops and grain-feeding.

G. C. WHEELER.

Advice for the Creameries.

R. M. WASHBURN, MISSOURI STATE DAIRY COMMISSIONER.

The summer season with its flood of cream is near at hand. This year there will be more difficulty in disposing of poor butter than ever before, and also more difficulty in getting good cream, unless we go at the proposition straight and with vigor. More butter than ever before is going to be made in this Western country this coming year, and it is up to the managers of the several creameries to produce the quality. There is absolutely no use in blaming the farmer for sending in poor cream so long as the poor and the good bring the same price. He will not give that extra work and care to make a good cream when there is no more money in it. Would you? Cream must be graded and graded this coming season or our market will be badly injured for many years to come.

SUGGESTED STANDARD.

First Grade Cream—Test 30 per cent or over and be smooth and free from rancid or stale flavors. It may be slightly sour, if clean.

Second Grade Cream—Everything else. Then make a difference of at least 4 cents per pound fat between first and second. Pay a good price for good stuff, then if your competitor wishes to pick up the old stuff at your top price he will be the loser, not you.

We must all combine thus far to agree to live up to the grading proposition. If the cream is shipped direct from the farm the matter will be easy; where it is received and shipped in bulk, get 4-ounce glass jars with a tight screw-cap upon which a number is stamped, fill this with the cream to be tested and graded and drop it into the can of cream.

This Custom Is Now General.

It has now become a general and also a safe rule to demand brands of goods that are well known and have a reputation for quality and reliability. Nowadays the manufacturers of good goods inform consumers of this fact and point out that safety lies in buying the brands that bear their names and trade-marks.

In this respect the Mayer brands of shoes are deserving of special mention. Our readers have no doubt become familiar with those shoes and know of their excellent wearing quality by actual use. The Mayer factory turns out shoes suitable for every member of the family and for all uses, Sunday shoes and everyday shoes, and they are known throughout the broad expanse of our land as the shoes of style and quality.

The "Honorable" are very popular line shoes for men and "Western lady" shoes embody the fit and style demanded by well-dressed ladies. Please bear this in mind when next buying shoes.

A Reward FOR THE Man Who Milks

The man who ships his cream direct is rewarded for quality. He stands alone. He doesn't have to bear the burdens and suffer for the mistakes and carelessness of his neighbors. If your cream is clean and not too sour and good flavor, you get the highest grade and the best price. If your facilities for handling your cream are better than your neighbor's and you can keep it longer you need not ship so often. Consequently you economize on time.—"Time is money."

Everything favors the individual shipper.

Our system takes care of him. Our factory is his natural home.

Send us your cream and we'll send you the money.

Respectfully,

BLUE VALLEY CREAMERY CO.,

ST. JOSEPH, MISSOURI.

Peerless Cream Separators

Reasons Why the PEERLESS is the Best

1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.

3rd—Enclosed frame. Free from dust. Injury resulting from machine impossible.

4th—Perfectly noiseless.

5th—Heavy enough and strong enough to lift a box car, which insures durability.

6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{100}$ of an inch.

7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.

8th—at normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter-fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

BRADLEY, ALDERSON & CO.,

Tenth and Hickory, KANSAS CITY, MO.

Great American Desert Seeds
are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drought tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. BLACKMAN, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

McBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa species. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

**PIONEER GUARANTEED
NURSERY STOCK
AT WHOLESALE PRICES.**

All stock guaranteed disease free and true to name.
Hart Pioneer Stock is pure bred and produces heavy crops.
Value received for every dollar sent us. No Agent's Commission.
WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

FOR SALE THE UNCLE SAM OIL-GAS BURNER

Asphalt Riddell for good roads and streets; crude oil for fuel, lubricating, or painting; gas, fuel-oil and water.

W. F. RIGHTMIRE, - 216 The Drive, - Topeka, Kansas

THREE FACTS

For Sick Women To Consider

FIRST.—That almost every operation in our hospitals performed upon women becomes necessary through neglect of such symptoms as backache, irregular and painful periods, displacements of the female organs, pain in the side, burning sensation in the stomach, bearing-down pains, nervousness, dizziness and sleeplessness.

SECOND.—The medicine that holds the record for the largest number of absolute cures of female ills is Lydia E. Pinkham's Vegetable Compound. It regulates, strengthens and cures diseases of the female organism as nothing else can.

For thirty years it has been helping women to be strong, curing backache, nervousness, kidney troubles, inflammation of the female organs, weakness and displacements, regulating the periods perfectly and overcoming their pains. It has also proved itself invaluable in preparing women for childbirth and the change of life.

THIRD.—The great volume of unsolicited and grateful testimonials on file at the Pinkham Laboratory at Lynn, Mass., many of which are from time to time published by permission, give absolute evidence of the value of Lydia E. Pinkham's Vegetable Compound and Mrs. Pinkham's advice.

Mrs. Pinkham's Standing Invitation to Women.—Women suffering from any form of female weakness are invited to promptly communicate with Mrs. Pinkham, at Lynn, Mass. All letters are received, opened, read and answered by women only. From symptoms given, your trouble may be located and the quickest and surest way of recovery advised. Mrs. Pinkham is daughter-in-law of Lydia E. Pinkham and for twenty-five years under her direction and since her decease she has been advising sick women free of charge. Out of the vast volume of experience in treating female ills Mrs. Pinkham probably has the very knowledge that will help your case. Surely, any woman, rich or poor, is very foolish if she does not take advantage of this generous offer of assistance.

Tired Nervous

When you feel languid, tired, nervous and irritable, your vitality is low—your supply of nerve energy exhausted, and your system running down for lack of power,

The organs of the body are working poorly, or not at all, and you are not getting the nourishment needed. This soon impoverishes the blood and instead of throwing off the impurities, distributes it all through the body. This brings disease and misery.

Feed the nerves with Dr. Miles' Nervine, a nerve food, a nerve medicine, that nourishes and strengthens the nerves, and see how quickly you will get strong and vigorous.

"My wife suffered with nervousness previous to a recent attack of typhoid fever, but after her recovery from the fever, she was much worse, and could hardly control herself being exceedingly nervous when the least excited. She was very restless at night, and never had a good night's rest. She also suffered much from nervous headache. Dr. Miles' Nervine was recommended by a friend. After the first three doses she had a good night's rest, and at the end of the first week's treatment she was wonderfully improved. Continued use of Nervine has completed her entire cure."

OTTO KOLB,

1921 Cherry St., Evansville, Ind.
Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

The Poultry Yard

Conducted by Thomas Owen.

Egg-Eating.

Egg-eating by hens is not a natural habit. They first learn it in confined runs and coops by the breaking of eggs or an occasional soft-shelled egg being dropped from the roost at night. Hens display unwonted eagerness to devour a broken egg at night, and the inference is when they attack the egg in the nest, that their systems demand something an egg furnishes and which they can not obtain otherwise. A reasonable supply of fine meat, ground bone, green feed, and lime in some form usually operates as a preventive for this almost incurable habit. After a hen once gets a taste of an egg it is almost impossible to break her of the habit, and, unless a very valuable fowl, she should be killed. The best remedy we know of is to furnish them with very dark nests, or provide them with a nest-box, the bottom of which should be cushioned and padded, having a hole in the center large enough for the egg to roll down out of sight underneath. A preventive is to feed lots of animal food and to salt their soft feed quite liberally.

Color of Eggs.

A correspondent, having purchased a sitting of Barred Plymouth Rock eggs and the color of same being diversified, asks if such is not a sign of impurity. We answer that it is not, because the eggs of Plymouth Rocks, both barred and white, vary in color from a pure white to a dark brown. None of the American classes of fowls lay a uniformly colored egg, while the Mediterranean, on the other hand, invariably lay white eggs. Brahmas and Cochins lay dark-brown eggs. It seems to be the rule that the older the breed, the more uniform is the color of the egg. If all breeders of Plymouth Rocks could agree on the color of the egg, they probably could breed to that color and get it uniform in time. But as long as there is a diversity of opinion as to which is the proper color, so long will the egg continue to come in all colors. The writer has a preference for a dark-brown egg, but his neighbor may have a preference for a clear-white egg. The Boston market calls for brown eggs, while the Philadelphia market will have none but white eggs, and so it goes. As long as our market does not call for any particular color in eggs we do not see that the color question amounts to much, only don't judge of the purity or impurity of the breed by the color of eggs that it lays.

Small Pens.

A failure results from the experiment of keeping fowls in small pens, in many cases, on account of the lack of exercise. They may be fed regularly with the proper variety of food, watered often, have all the grit and animal food they need, yet, if they have no exercise, they will not thrive. Fowls in a state of domestication lose the use of their wings in a great measure, and can not take exercise by flight. They must, therefore, depend on running, walking, or scratching. The hen is a scratching creature, and those poultry-keepers living in villages, having only small space for their flocks, should not omit furnishing the inducements to this exercise. Every one knows with what pertinacity fowls will dig in a flower garden when they get a chance. With a spade in hand the small yard may be rendered attractive to biddy by digging it up and sowing lots of millet seed therein, and she will scratch till every seed, bug, and worm is secured, as contentedly as she would in the flower garden, and thereby obtain her needed exercise. It is not absolutely necessary that fowls should have unlimited range to do well and be profitable, for they seldom go beyond reach unless forced to seek for their living. However, ample space is needed for walking and scratching, and if they get this, and the place be kept clean, pure, and fresh they will do well. Inactivity is the bane of all fowls, for it engenders disease, morbid and unnatural desires such as feather-pulling and egg-eating. Hence, it is advisable to give fowls all the exercise they can take, for it stirs up the blood, keeps down internal fatness, promotes fertil-

ity, digestion, and assimilation, consequently health, contentment, and profit are sure to follow.

The Breeding of Geese.

That the growing of geese for market is a decidedly profitable branch of poultry work is less well-known than it should be. Geese are easy to raise when rightly managed, and as they pretty much take care of and feed themselves in summer, when the farmer is engrossed with other labor, the growing of geese especially commends itself for those who are so busily engaged they feel they can not give the time to poultry work.

The essential thing for them is a grass range. With that accessible they pretty much take care of themselves. In a very dry time, when fresh grass is not at hand, they require some grain-food, but as they give the preference to brooksides and low, swale land, which is practically certain to have green grass growing even when the upland is brown and dry, it is easy to see that the times when they require grain-food in summer are few and far between.

In winter it is necessary that they have grain-food once a day, and when laying time comes they should be given a ration of meat-meal or beef scraps mixed up with some cooked vegetables and meals. At the breeding season they should be well fed in order that they may produce a good many eggs that shall yield strong, vigorous offspring. Nor do they need expensive houses and runs. An open front shed, facing the south, is the best quarters for them. It is better that this shed be a little distance from the other farm-buildings, so that the laying and sitting geese be as little disturbed as possible during the laying and breeding seasons.

The most popular varieties of geese are the African, Embden, Toulouse, and Brown and White Chinese, of which the two varieties of Chinese are the smallest. Of the larger varieties the Toulouse and African are gray, the Embden white. As the feathers may be made a considerable source of profit, and as white feathers command the highest prices, it may be well for a beginner to choose a white variety at the outset.—Gem State Rural.

Build Now for the Future.

Producing winter eggs is the most profitable end of the poultry business with the larger number of poultry-keepers.

The obtaining of a liberal supply of eggs with any degree of certainty during the winter months is the result of thorough care and preparation. While hens can frequently be induced to finish molting before winter really sets in, still it is to the pullets that we must look for our principal source of supply. Now any old hen or pullet we pick up will not do this trick. They must be in the proper condition to lay. We can not expect a hen that is not through molting to lay many eggs, as a general thing. Neither can we expect an immature pullet to lay. In other words, if one is after a liberal supply of winter eggs, the time to make one's preparations is the spring before, and get the chicks out early enough so that the pullets will get their growth and mature before the cold weather sets in. If these pullets begin laying freely before November 15, the battle is more than half won, providing they have reasonable care and feeding. It is a generally recognized fact that the average hen produces fewer eggs each succeeding year after the first laying season. And it has also been my experience that the ordinary hen will also molt a little later each year. So it is obvious that for the winter-egg business all 3-year-old hens should be discarded and preference given to pullets, if possible. With the American breeds I consider the last two weeks of March and the first two of April the most satisfactory time to hatch winter layers; and with the Mediterranean breeds from the middle of April to the latter part of May. It is not advisable to hatch too early, as such pullets will often lay a small litter and molt, in which case they are not much better than old hens. It is necessary to get good results to keep the pullets growing with as few setbacks as possible, as anything that will retard their growth is pretty certain to affect the winter egg supply. If winter catches a pullet in an immature condition, she can generally be depended on not to lay before the price of eggs is on the decline.

To keep the laying stock in condition during the winter when nothing is

POULTRY BREEDERS' DIRECTORY.

FOR SALE—Choate Light Brahma eggs, \$1 for 15; \$1.75 for 30. Wm. Plummer, Barclay, Kans.

ROSE COMB BROWN LEGHORN EGGS, 15 for \$1, 50 for \$2.50, 100 for \$4. Mrs. John Holzhey, Benden, Kans.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED ROCKS and Silver Penciled Wyandottes. Having hatched all the chicks I wish, will sell eggs from my high scoring pens at \$1.25 per 15; utility eggs at 5 cents each. Mrs. Chas. Osborn, Eureka, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1 each. Eggs, sitting \$1.50; for incubators, \$5 for 100. Address Ben Warren, Maple Hill, Kans.

S. C. B. LEGHORN EGGS—From first cockerel at the State show. \$2.50 per 15. Other pens \$1 per 15. Mrs. Siller Seal, Meriden, Kans.

R. C. B. LEGHORN EGGS FOR SALE. Stock from best laying strains \$1 for 15; \$5 for 100, best selected and fresh eggs. Mrs. Bertha Evans, Route 4, Box 32, Lyons, Kans.

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

BARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. C. Brown and S. C. White Leghorns. S. Spangled Hamburgs, S. C. Black Minorcas. Prize-winners in every pen. Eggs, \$1 per 15. Vira Bailey, Kinsley, Kans.

BLUE BIRDS—Barred to the skin. Hawkins Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kansas.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Shiley, Lawrence, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 96%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller-man, "Vinewood Farm," Morris City, Kans.

FOR SALE—Throughbred Wyandottes. Eggs, \$1 per sitting. 15. 30 Parallel St., Atchison, Kans.

BARRED PLYMOUTH Rock winners; won 1st on cki. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Topeka, Kansas.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

EGGS, EGGS—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting, Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, \$1 for \$1. Turkeys, Peacocks, Barred, Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and Brown Leghorns, White, Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Plate Center, Neb.

EGGS FROM MAMMOTH BARRED PLYMOUTH ROCK CHICKENS \$1.50 per 15. A. D. Wyncoop, Benden, Kans.

BLACK LANGSHANS—Hens scoring 98 and npard—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

FOR SALE—Barred Plymouth Rocks, exclusively. Fresh eggs from mature stock, carefully packed, \$1 per 15. Mrs. T. B. Shulsky, Denton, Kans.

MAMMOTH BRONZE TURKEY EGGS—\$3.00 for 9 from choice hens and 34 pound young tom. Also a few Fox Terrier puppies. Safe delivery of eggs guaranteed. Mrs. A. E. Harness, Route No. 1, Speed, Mo.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Colie pups. W. B. Williams, Stella, Neb.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.65. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

FOR SALE—Golden Wyandotte eggs, from the best pen; \$1.50 per 15. E. Davis, 910 Madison, St., Topeka, Kans.

FOR SALE—After May 1, best Barred Rock eggs in State for \$1 for 15; \$5 for 100. A. C. Rait, Junction City, Kans.

BROWN CHINA GESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Meriden, Kansas.

S. C. B. LEGHORN EGGS—Extra fine. Cockerels from prize-winners; good markings; \$1 per 17; \$5 per 100. Mrs. D. M. Evans, Edgerton, Kans.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emden geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Mapleton, Kans.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

POULTRY BREEDERS' DIRECTORY.

FOR SALE—White Wyandottes, one pen high scoring; also eggs \$1 per 15. A. R. Gage, Minneapolis, Kans.

BUFF COCKER EGGS—From high scoring prize-winning stock, \$1.25 per 15; \$5 per 100. Stock for sale. A. R. Gage, Minneapolis, Kans.

BUFF LEGHORNS AND BUFF ORPINGTONS. Catalogue free. W. H. Maxwell, 1240 Quincy St., Topeka, Kans.

WHITE LILY POULTRY YARDS—One dollar buys 15 eggs from pure bred White Langshans and Silver Spangled Hamburgs. Mrs. John Cooke, Greeley, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fair. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

WHITE WYANDOTTE COCKERELS, (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Arzt, Larned, Kansas.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Duskin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore Eureka, Kans.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois

SILVER LACED AND WHITE WYANDOTTES \$1 per sitting of 15. Eggs guaranteed. Circular free. R. C. Macaulay, Route 1, Frederick, Kans.

Pure Single Comb Brown Leghorn Eggs—\$1 for 1; 100 for \$3. F. P. Flower, Wakefield, Kans.

Cornish Indian Game Eggs. Write L. C. Horst, Newton, Kansas.

Buff Leghorns S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 3, Wakefield, Kans.

HIGH CLASS POULTRY Silver Wyandotte, White Wyandotte and White Plymouth Rock. Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

Eggs for Hatching M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

FOR SALE Light Brahma eggs. I am up with my orders. Set all I wish to, will cut prices one-half for immediate orders, \$1 for 15; \$5 per 100. From premium stock. Also a few settings of Buff Cochin Bantams, at \$1. Mrs. J. R. Kenworthy, Wichita, Kans.

W. P. ROCKS EXCLUSIVELY. Eggs for hatching 15 for 75 cents; 50 for \$2. MRS. ALICE PERKINS, Munden, Kansas.

BUFF ROCK EGGS

Here they are. Good ones. Fifteen for \$1.45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

Imported S. C. Black Minoras

The world's greatest laying strain. Eggs \$1.50 per 15; \$6 per 100. Send 5 cents for circular. Address George Kern, 817 Osage St., Leavenworth, Kans.

SILVER WYANDOTTES exclusively. Blue ribbon winners at the State Fair and State Poultry Show. Eggs \$2 per 15; \$5 per 45, express prepaid. A few good cockerels for sale. W. R. Comstock, Station B, Topeka, Kans.

Eggs For Hatching

WHITE HOLLAND TURKEYS, MAMMOTH, PEKIN DUCKS AND BARRED PLYMOUTH ROCKS. \$1 per setting for any of the above, fresh eggs carefully packed and safe arrival guaranteed. A. P. Ilse, Manhattan, Kans.

White Plymouth Rocks

Scoring 95 Scored by Rhodes. Eggs from selected pens, \$1.50 per 15. Eggs for incubators, \$5 per 100. Mrs. Edna Melor, Route 2, Lincoln, Kansas.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free.

H. H. Hiniker, Box 90, Mankato, Minn.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 100, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention, KANSAS FARMER when writing.

Neosho Poultry Yards

Rose Comb R. I. Reds. One pen of bright red hens and pullets, weighing from 6 to 7½ pounds, headed by a fine red, 1-year-old, 10 pounds in weight. Cock bred for show purposes. Eggs from this yard, \$2 per 15. Other yards headed by cockerels scoring from 90½ to 94½. Eggs from this yard, \$1.50 per 15. J. W. Swartz, Americana, Kans.

R. C. Rhode Island Reds

At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hen, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. NO STOCK FOR SALE.

A. D. WILLIAMS, Inman, Kans.

available, they must be supplied with all the elements necessary to egg-production. Grit and shells should be kept before them at all times, and the fowls should be made to scratch in litter for their whole grain to keep them in a contented, vigorous, and healthy condition. Hens like a variety of food, and it has generally been my method to feed wheat, corn, oats, and barley as a scratching food, generally separately rather than mixed, and by far the largest share of wheat. I give a light feed in deep litter just to keep them busy at noon. Then just before dark give a liberal feed of whole grain which I mean to vary, and rather more than they can eat well mixed in litter, the idea being to have the fowls go on to the roosts with full crops, and leave a surplus to keep them scratching an hour or so in the morning, when I feed a mash of bran, corn-meal, beef-scrap, and boiled potatoes or steamed clover fed warm and crumbly, just what they will eat up clean. This method of feeding, with fresh water with the chill taken off morning and night, with a few cabbage or beets from day to day will generally produce a good crop of winter eggs, providing the fowls are housed in snug, dry quarters free from moisture. A low building is generally preferable, and ventilation enough allowed to prevent things from becoming wet and sticky. The main thing is to keep the fowls hustling and vigorous.—Successful Poultry Journal.

\$300,000,000 in Eggs.

The busiest spot on the face of the earth is Uncle Sam's farm, and the busiest thing on the whole busy ranch is the Great American Hen. Biddy's joyful cackle begins on the New England coast at sunrise—follows the morning light across the prairies of the Middle West, and ends only at the "jumping off" place—the Golden Gateway to the Pacific. Every five years Biddy doubles her business. Think of that—twice as many eggs, chicks, fowls, in 1905 as in 1900, and this year will probably show a total credit to Biddy's industry of about \$300,000,000.

What is the rest of Uncle Sam's barnyard doing to compare with that showing? There's no mistaking a patent fact—Biddy "cuts the ice," and the American farmer and his hustling wife are getting "wise" to the fact. Everywhere the land is dotted with chicken-coops and hen-yards. The man with a farm, the man without a farm—and the suburbanite—have all gone into poultry, and those who put brains in too, are getting dollars out. This kind of people—hundreds of thousands of them—keep fowls in a healthy and prolific condition the year 'round by feeding Dr. Hess Poultry Pan-a-ce-a, which gives the fowl in confinement, by perfect digestion and assimilation the same elements she would find for herself if at liberty.

Careful study and experiment under just the conditions that the average poultryman finds in his own yard, led Dr. Hess to the gradual perfecting of his Pan-a-ce-a. It is not a stimulant, and should not be confounded with preparations of that class. It does not excite unnatural production only to leave the hen exhausted and unprofitable. Rather, it makes a hen natural under unnatural conditions, by supplying iron for the blood and nitrates to help nature in throwing off poisonous matter, so that "tone" and vigor are given the whole system, and disease eliminated. It is easy to see from this how important Poultry Pan-a-ce-a is to the hen man. Dr. Hess and Clark, of Ashland, Ohio, are so sure of its positive merit that they cheerfully give a guarantee with every package. All they ask is that you use it according to directions. If you do and occasionally sprinkle the roosts, nests, and fowls with Instant Louse Killer your

POULTRY BREEDERS' DIRECTORY.



Subscription, 25 Cents a Year.

"OUT THERE IN KANSAS"

All about the chicken industry in Kansas, the bees and pigeons. Full of information illustrated and made plain for the people. Practical, by and for practical people. The paper that reaches the chicken folks. If you are interested in poultry, bees or pigeons, THE HEN will interest you. Address THE HELPFUL HEN, Topeka, Kansas.



Rose and Single Comb White Leghorns and White Wyandottes
IN ALL THEIR PURITY
Unsurpassed in every respect for beauty, utility as winter layers. At State show, the largest in the U. S., just held at Topeka Kansas, 26 prizes were awarded me. Write for my catalog, giving prices on stock and eggs.
W. S. YOUNG, McPherson, Kansas
When writing mention this paper.

success in poultry culture will be large. It costs but a penny a day to feed it to 30 fowls.

The Farm Telephone.

The telephone is one of the greatest blessings to the farmer that has ever been invented. It has become a necessity, has no equal as a time-saver, and time is money. After once being used, you can't keep house without it. In time of sickness, its value can not be estimated. You can step to the little box on the wall and have a doctor on the way before you could get a horse ready to go after one, and then he can tell you a great many times what to do to relieve the suffering of your loved ones. You can call a veterinarian for your stock when they are sick and many times save your valuable animals. Many a farmer has said, "There is a time once every year that my telephone is worth every dollar both it and the line has cost me for only three-minutes' use of it."

The telephone is so useful in so many ways. It takes the lonesomeness away from the farm and makes farm life one of the most independent lives there is to-day, but like all other good things, it has its drawbacks. Lightning is the worst enemy of the telephone industry to-day. It is dangerous when it follows the telephone-line wire into your home, as it often endangers the lives of your family and property, and how annoying to have a telephone burned out in the busy season when you need it so very badly, and that is just when we have the hard electrical storms which puts your telephones out of business, but you can save all this worry, annoyance, and danger if you will write the W. E. Ashby Telephone Cut-Out Company, 111 Square St., Chariton, Iowa. They have a device that they guarantee to keep all of the lightning out of your telephones. See their advertisement on another page. Write for their booklet—how to get one of these devices free.

Minerva's Wisdom.

The following anecdote is being told of Miss Helen Gould: Miss Gould, who is noted for her wit, recently entertained at luncheon a party of little girls from some charitable institution. Afterwards, Miss Gould showed the children about her house, pointing out some of its interesting contents.

"This," she said, stopping before a bronze in the hall, "is a statue of Minerva."

"Was she married?" asked a little girl.

"Oh, no, my dear," replied Miss Gould; "you know Minerva was Goddess of Wisdom."—Harper's Weekly.

Larned, : : : : Kansas

POULTRY BREEDERS' DIRECTORY.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. E. Wenner. Blue Mound, Kansas.

Johnnie Chase, Glasco, Kas. Breeds Black Minorcas, S. C. Brown Leghorns and Barred Rocks. Second to none in the state. Eggs, \$2 per sitting.

Rose Comb Brown Leghorns EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MATSON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READ-ING, KAN.

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm.

Sixteen for \$1.50

Eggs from pure-bred stock. Barred Plymouth Rocks, White Wyandottes and S. C. B. Leghorns. Ten years in the poultry business. Address Mrs. E. L. Lindner, Clay Center, Kans.

Kansas Chick Feed

For baby chicks, a balanced ration which makes the little fellows grow; 100 pound sack, \$2.50. Kansas Lice Killer, the strongest made; a concentrated liquid compound. Each package equals one gallon; 5 packages prepaid, \$2. W. E. SMITH, maker of Kansas Safety Incubators, Osborne, Kans.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR, Glendale Park, Hutchinson, Kans.

S. L. Wyandottes

Indian Runner ducks. Our Wyandottes have been line bred for 20 years and never fail in any company. Our yards are headed by Silver Prince, the 1st cock at the Kansas State Show, and three of his cockerels. Stock for sale. Eggs, \$2 per sitting. Incubator eggs, \$5 per hundred. Duck eggs, \$1.50 per sitting.

M. B. CALDWELL, Broughton, Kansas

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa mash, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co. Wichita, Kansas

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants. : : : : :

A. H. DUFF, Larned, Kansas

I am coming to stay with you. If you hatch me in a Kansas Safety Incubator. Raise me in a Kansas Safety Brooder and feed me Kansas Chick Feed. Keep the place free from lice and disease germs with Kansas Lice Killer. These are all made and warranted by

W. E. Smith, Osborne, Kans.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 98½, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B., Topeka, Kans.

BUFF LANGSHANS

White \$2, Black \$2, \$1 and \$5 per 100; Buff Leghorns, Orpingtons, Cuckoo, S. & D. C. B. and White Leghorns, H. and W. Rocks, W. and S. L. Wyandottes, L. Brahma, \$1.50 to \$2.00 per 15. Toulouse (Geese) eggs 20¢ each. M. H. turkeys, \$1.50 and \$2 per 9. Imported and native high-scoring blood in our yards. Medium Kansas Farmer when writing. America's Central Poultry Plant, J. A. Lovette Millville, Kans.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

Topeka Supply House

7th and Quincy, Topeka, Kansas

THE FAMOUS OLD TRUSTY

More than your money's worth in incubators during the summer. We have them all best; 40, 60 or 90 days to prove it. 5 year guarantee.

Now is the time to write to

M. M. JOHNSON, The Incubator Man, Clay Center, Neb.



The above is a cut of the Kansas Safety Incubator, manufactured by W. C. Smith, of Osborne, Kans. It is a practical machine; one that will hatch chicks and one that can be depended upon to do its work at all times. See his advertisement in this paper.

Horticulture

Cultivation of the Orchard.
JOE A. BURTON, ORLEANS, IND., BEFORE THE AMERICAN POMOLOGICAL SOCIETY.

In the evolution of improved methods in agriculture from the crude ways of our fathers, the teachers themselves had to learn. With no one to call them down, they frequently went to extremes. Because more culture than our fathers gave proved beneficial, they jumped at the conclusion that the more culture the better. Also, if intensive culture was best for the pumpkin, it was also best for the plum; if best for the plum, also for the apple. They failed to observe that yard-grass does best only where the ground is tramped hardest. Careful observation will show us that some things grow well only by much culture; other things do well with little or no culture. Just how much culture the apple orchards require for best results has not yet been fully determined. It will be found somewhere between the clean culture taught by our agricultural colleges and the no-culture practiced by many farmers.

I have a small orchard planted about twenty years ago in blue-grass sod, and has been so kept ever since. The only cultivation has been a mulching of straw around the trees when we had the straw and time to apply it. This has been about once in two years. On account of the heavy yield of summer varieties, we have found it necessary to apply stable manure to them freely. This year the fruit from two Yellow Transparents sold for \$20; from one Trenton, \$11; two Benoni, \$26.

But I am not here as an advocate for a blue-grass orchard. I am only trying to point out the fact that the high culture necessary for a good grain-crop is not always necessary for a good apple-crop. To be plain, I don't believe clean culture is best for the apple. The amount of culture for best results depends on the fertility of the soil. On very rich soil, apples do best with no culture, save mowing the weeds or grass. Too much, and especially too late, cultivation prevents the proper coloring of the fruit. Whatever detracts from color detracts from quality.

Our apple lands in Southern Indiana are a heavy clay, rich in potash and a goodly amount of phosphoric acid, both largely in unavailable form. Nitrogen is in very moderate quantities. The land is hilly, and clean culture means the washing away of the soil. I don't believe the All-Wise One made this, the best of all apple soils, and then, for the best results, requires the operator to do something that will ruin the soil. True, we may plow the orchard in the spring, cultivate during the summer, and grow a cover crop for winter that will prevent washing during winter, but there is no protection during the summer.

To make the potash and phosphoric available, it is necessary to incorporate humus with the soil. This is done more readily by keeping the vegetable matter on top, or near the surface, than by turning under. With a cover crop on the land, whatever it be, instead of plowing under, we grind it up with the surface soil by use of the rolling harrow. We use two harrows, one throws in, the other out. One follows the other, thus always keeping the land level. We go both ways. If we have one inch of cover crop, and mix it with two inches of soil, we have a mulch of four to five inches. This will effectually prevent any washing and will remain a mulch till we grow another cover crop. It is, in fact, a kind of sponge that will drink up a two-inch or three-inch rain, before there is any surplus water to run off. This harrowing can be done as often as desired, or as the health of the land requires. Our orchard is fairly rich, and we never harrow more than twice, and never later than June 15. For a cover crop, we grow crab-grass, and think it ideal. It is cheap for seed, being already sown, makes a nice carpet to work on, retains moisture, never giving up its dew till in the afternoon. If the land were poor, we would grow some nitrogenous crop.

Now, a word about labor. The hired man loves to ride. This mode of culture pleases him, and he keeps in a good humor. But put him to plowing in the orchard, and it is just the reverse. Is there any other work so disagreeable? He must lift and throw his plow twice every thirty-three feet, and at the same time he must keep the horses and the single-tree off the trees.

He is sure to bark some trees. Then he will get mad and abuse the horses, when they are not to blame at all. They will get mad, and in the excitement skin lots of trees. Then you must keep the children away, lest they hear something not in the Sunday-School lesson. The poor hired man! Will St. Peter charge these ugly words up against him? I rather think not, many of them, but will put a goodly number in the bill of the easily duped orchardist, but by far the larger part will have to be settled for by the professor who taught that such culture was necessary.

That fine apples can be grown by my method is evidenced by my awards at Paris and St. Louis; a silver medal at Paris, a gold medal at St. Louis; and this season's crop. The product of 110 Grimes this season sold for \$1,700, or \$15.50 per tree. I don't claim these results are due to the method of cultivation alone, but it has much to do with it. It is certainly the easiest method of successful cultivation.

The Apiary

The Beginning of the Honey Season.

The watchword with the beekeeper now is the strength of colonies. Every possible means should be used to increase the number of bees in each hive. A good honey-crop depends solely on strong colonies, and all such that are strong at the beginning of the honey harvest, can be depended upon to store a valuable crop of honey.

To work a colony up in strength, it must be constantly gathering honey, or fed. Feeding produces as good results as gathering honey, if fed regularly, in producing young brood, and as large a force of bees will be the result. It is not necessary to feed if the bees are gathering honey from flowers, but if they are not securing enough honey to keep brood-rearing going on, or do not have a surplus in the hive to draw on, it is best to feed them.

It is an important thing to know just how and when to feed bees. Feeding should be done at night, and not during the daytime. Small wooden feeders holding a pint or half a pint may be set at the entrance of the hive after dark each evening, but to be absolutely safe with this manner of feeding, be sure that the bees find the syrup immediately after placing it there. At first they may be slow of finding it, but when once acquainted with it they will promptly attend to it. In the morning early before the bees begin to stir take away all the feeders, and put them securely away somewhere, so the bees will not find them during the day. Feeders may be placed in an upper story to the hive, and the bees thus fed more safely, but it is inconvenient to thus have to remove the upper story and feeders when we wish to examine the colony, and at this season of year we want to go through them very frequently. Feed only the best of white sugar at all times, as bees often refuse to take the cheap dark grades of sugar. Make a good syrup that has some body to it, and not merely sweetened water.

Get a full equipment of supplies and plenty of them. A lack of even one hive fully equipped, when needed, would cost you almost as much as would pay for all your supplies. All needed hives, surplus honey boxes, and comb foundation are indispensable, and many other things might be added to this list. If you have many bees get an extractor, and even if you have but a half dozen colonies it will pay for itself in one season. We do not keep supplies for sale, but they may be found by looking up the advertisements in THE KANSAS FARMER.

Taking the country over, June is perhaps the best honey month in the year, but in many localities a good surplus may be obtained in May, and also in August. One who has kept bees in any one locality for a number of years can nearly tell just when to look for every important flow of honey, when such and such flowers open, and thus he can be prepared to take advantage in each case.

The secrets of success are first, strong colonies; second, abundance of storage room properly applied. Many small beekeepers underestimate the storage capacity of a strong colony of bees, and do not give them enough surplus room. This is the most fatal mistake we can make. It matters not how well we have managed up to this point, if we fail in this, we fail in all. Usually, at the beginning of the honey

30 Years of Satisfaction. BLACK DIAMOND Ready Roofing



On ten years and still in good condition.



Covered with 15,000 ft. of Black Diamond Roofing.

BLACK DIAMOND is not an experiment. For over 30 years it has been used all over the country with satisfaction. Millions of rolls are being sold every year.

Black Diamond is not sold on a promise of what it will do, but on a record of what it has done.

No other ready roofing can equal its record. It is made of wool felt and pitch, the best waterproofing materials known. Anyone can lay it—no skilled labor required.

Samples and booklet showing buildings all over the country that are covered with Black Diamond, mailed free on request.

BARRETT MANUFACTURING CO.
New York, Chicago, Philadelphia, St. Louis, New Orleans, Cincinnati, Kansas City, Cleveland, Minneapolis, Allegheny.

A Buggy Bargain



Buy it on a Plan so You Know You Have a Bargain
WE PAY THE FREIGHT.

You deal with the factory. 30 Days Trial. You can test its quality for yourself and see that its price is about half the local dealers' price.

GUARANTEED TWO YEARS

We insure you against any loss if a flaw develops in either workmanship or material within that time. Do you want a vehicle of that kind sold that way? Anything you need in vehicle line on just that plan. Send today for manufacturers' catalog. Address Dept. D.

The Apex Mfg. Co., Bloomington, Ill.

"The Wonder City"

Eldorado Springs

Hidden away in the foothills of the Northern Ozark slopes, in the midst of green forests, lies Eldorado Springs, Mo., an ideal health and pleasure resort. Since the discovery of its now famous springs, thousands have received benefits from the healing waters, and have gone away eloquent testimonial of their curative properties.

During the summer season, excursion tickets will be sold to Eldorado Springs at

Exceptionally Low Rates

To those seeking a quiet, ideal place in which to spend a summer vacation at a minimum expense, Eldorado Springs offers many attractions.

Booklet and full particulars as to train service, rates, etc., may be had of any M. K. & T. Agent or by addressing

W. S. ST. GEORGE
Gen'l Passenger Agent, M. K. & T. Ry
St. Louis, Missouri



well as a big thing for the stockholders of the company.

Biennial Meeting General Federation of Women's Clubs at St. Paul, May 30-June 7.

The Chicago Great Western Railway will on May 28 to 31 inclusive, sell tickets to St. Paul at one fare plus \$2 good to return June 9, with the extension privileges. For further information apply to any Great Western agent at J. P. Elmer, G. P. A., St. Paul, Minn.

Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service, for the week ending May 7, 1906, prepared by T. B. Jennings, station director:

CLIMATOLOGICAL DATA FOR THE WEEK.

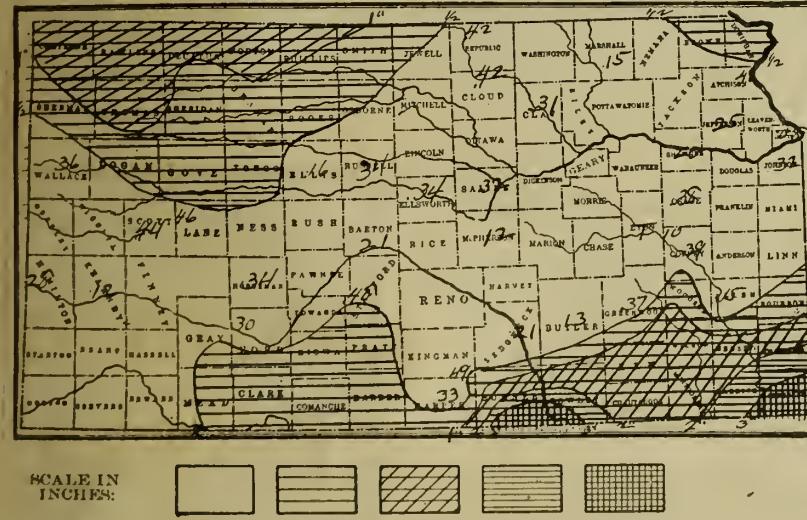
Temperature. Precipitation

	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
WESTERN DIVISION.						
Cimarron.	80	36	58	0.50	.....	.....
Colby.	81	36	55	1.41	.....	.....
Coolidge.	80	32	56	0.28	.....	.....
Dodge City.	81	40	58	0.30	-2.5	.....
Englewood.	86	47	63	0.52	.....	.....
Farnsworth.	82	36	58	0.46	.....	.....
Hoxie.	82	36	58	0.92	.....	.....
Hugoton.	76	36	58	0.34	.....	.....
Jetmore.	85	39	58	0.34	.....	.....
Norton.	85	36	58	1.31	.....	.....
Scott.	82	38	58	0.44	.....	.....
Wallace.	78	34	56	0.36	.....	.....
MIDDLE DIVISION.						
Burr Oak.	84	40	58	0.70	.....	.....
Clay Center.	84	40	58	0.31	.....	.....
Concordia.	83	45	60	+1.42	-2.28	.....
Cunningham.	87	43	61	0.60	.....	.....
Ellinwood.	83	42	60	0.21	.....	.....
Hays.	85	38	56	0.16	.....	.....
Macksville.	83	42	58	0.48	.....	.....
Medicine Lodge.	85	43	62	0.91	.....	.....
Republic.	81	41	58	0.42	.....	.....
Russell.	83	40	57	0.34	.....	.....
Salina.	80	40	58	0.32	.....	.....
Wichita.	85	48	64	+1.21	-0.64	.....
EASTERN DIVISION.						
Atchison.	80	46	62	0.41	.....	.....
Burlington.	87	45	66	0.39	.....	.....
Columbus.	84	50	68	3.14	.....	.....
Emporia.	78	46	63	T	.....	.....
Fall River.	86	47	68	1.10	.....	.....
Frankfort.	82	41	60	0.15	.....	.....
Independence.	90	51	70	1.00	.....	.....
Iola.	82	49	66	0.15	.....	.....
Kansas City.	82	49	64	+4.08	-83	.....
Olathe.	81	46	64	0.32	.....	.....
Pittsburg.	85	50	68	1.35	.....	.....
Topeka.	80	48	63	+2.20	-81	.....

GENERAL CONDITIONS.

Excepting Saturday and Sunday the week was warm. In the western division the temperature averaged about normal, and in the middle and eastern divisions slightly above normal. The maximum temperatures generally occurred on Thursday but failed to rise as high as those of the preceding week. The minimum temperatures generally occurred on Tuesday and, in general, were lower than those of the preceding week. The precipita-

RAINFALL FOR WEEK ENDING MAY 5, 1906.



tion for the week was above normal in the extreme northwestern and southeastern counties while light to fair showers occurred over the rest of the State. Thunderstorms occurred in the central and southern counties and hailstorms in the southeastern counties. The week has given good growing weather.

CONDITIONS IN DETAIL.

EASTERN DIVISION. Anderson.—The week has been cloudy and showery, with rain on the last five days. Hail was destructive in parts of the county. An exceptionally heavy rain occurred northeast of Garnett, on the 4th.

Atchison.—The week began and ended with cloudy days, but the rest of it was clear and warm rain fell on two days. The total rainfall was 0.41 of an inch.

Allen.—It was a mild, cloudy week with cool nights and light rains almost every day. Brown.—It was a cool week with the maximum temperature ranging in the sixties and seventies, and cool nights. Light showers fell the first part and latter part of the week.

Bourbon.—The weather was mild and partly cloudy. Showers fell on five days but were generally very light. The highest temperature was 85° on the 1st.

Chase.—The temperature has been about normal. The maximum rose above 80° on two days and the minimum fell to 43° on two days. There were three clear days and three days with light showers.

Chautauqua.—The week was cloudy and rainy and only one day was entirely clear. A number of thunderstorms occurred during the week and quite a hailstorm was experienced on Friday night. Saturday morning was rather cool with a minimum temperature of 52°. The highest temperature was 87° on Saturday.

Cherokee.—The temperature was a little higher than the average for the season. It rained on five days, the total for the week being 3.14 inches. There was a severe thunderstorm and some hail on the 4th, but it did little damage.

Coffey.—Two days were clear and five partly cloudy. Light showers fell on four days. It was rather warmer than the seasonal average till the end of the week when it turned cool.

Crawford.—The days were generally warm with westerly winds. The temperature did not go very high nor very low. There was a heavy rain on the first of the month and showers on three other days.

Elk.—There was a very heavy, local rain and a destructive hailstorm on Monday, but some parts of the county are needless rain. Wednesday and Saturday were cool days but it was warm the rest of the week with temperature below 50° on only one day.

Greenwood.—The week was partly cloudy

The temperature was a little lower than the seasonal average.

Cloud.—The first two days and the last day were cloudy but the middle of the week was clear. The temperature was a little above normal the first two days, but below the rest of the week. Showers fell on four days, making a total of 0.42 of an inch of precipitation.

Cowley.—A heavy rain of 3.05 inches fell on the 30th and 0.40 of an inch fell on the 2d. The weather was warm.

Ellis.—The first two days were cool and showery, the middle of the week was clear and fine, and Saturday was cloudy, cold and damp. Light showers fell on three days. The mean temperature for the week was rather low.

Ellsworth.—Light showers fell on three days making altogether 0.34 of an inch of rain.

The highest temperature was 86° on the 3d and the lowest 38° on the same day.

Harper.—The rainfall for the week was 0.33 of an inch on the 30th.

Harvey.—The week was moderately warm with no rain. Saturday was quite cool with a northeasterly wind.

Harper.—The rainfall for the week was 0.33 of an inch on the 30th.

Harvey.—The week was moderately warm with no rain. Saturday was quite cool with a northeasterly wind.

Kingman.—The first two days and the last day of the week were partly cloudy and the middle part was clear. Wednesday and Saturday were quite cool but the other days were about the seasonal average. 0.60 of an inch of rain fell.

McPherson.—There was pleasant weather during the week but it became rather cool towards the close. 0.12 of an inch of rain fell on the 3d.

Pratt.—Excepting the first two days, which were showery, the week was warm and pleasant. The highest temperature was 87° on the 1st and the lowest 44° on the 3d.

Reebs.—Maximum temperatures ranged in the sixties on four days and minimum temperatures in the forties on five days, but two of the days were warm. Showers fell on three days.

Russell.—Monday and Thursday were quite cool but the other days were pleasant. Moderate showers fell on two days making a total of 0.34 of an inch of rain.

Saline.—The weather was rather cool, the temperature falling below 50° on every night but one and rising to 80° on but one day. A trace of rain fell on the 2d and 0.32 of an inch on the 5th.

Sedgewick.—The week was a dry one with temperature slightly above normal. Three days were clear, three cloudy and one partly cloudy. Showers fell on five days.

Stevens.—The temperature was a little higher than the average for the season. It rained on five days, the total for the week being 3.14 inches. There was a severe thunderstorm and some hail on the 4th, but it did little damage.

Wichita.—The week was cool and partly cloudy. Light showers fell on four days. It was rather warmer than the seasonal average till the end of the week when it turned cool.

Wichita.—The days were generally warm with westerly winds. The temperature did not go very high nor very low. There was a heavy rain on the first of the month and showers on three other days.

Wichita.—There was a very heavy, local rain and a destructive hailstorm on Monday, but some parts of the county are needless rain. Wednesday and Saturday were cool days but it was warm the rest of the week with temperature below 50° on only one day.

Wichita.—The week was partly cloudy

and generally warm. Good local showers fell on three days.

Jefferson.—There were only two clear days during the week. Maximum temperatures ranged in the sixties the first of the week and in the seventies and eighties the latter part. The rainfall was only 0.25 of an inch.

Johnson.—The week has been ideal. The highest temperature was 81° on the 1st. Minimum temperatures were generally in the forties and fifties. 0.32 of an inch of rain fell on the last two days.

Linn.—One day was clear and the rest were partly cloudy. Showers fell on the last five days, the total for the week being 0.76 of an inch.

Lyon.—The highest temperature was 78° on the 1st, 3d, and 4th, and the minimum was 48° on the 5th. Traces of rain fell on three days.

Marshall.—One day was cloudy, four partly cloudy, and two were clear. 0.15 of an inch of rain fell on Monday and a trace on Saturday. The temperature was about the average for the season.

Montgomery.—The week was warm and showery with an excess of cloudiness. The highest temperature was 90° on the 4th and the lowest 51° on the 5th. The rainfall for the week was one inch.

Osage.—The days were warm and the nights were cool, the maximum temperatures ranging in the seventies and eighties, the minimum for the week being only 44°. Showers fell on three days, making a total of 0.38 of an inch of rain.

Shawnee.—It was a dry week with 0.20 of an inch of rain on one day, the 5th. The temperature was above normal on four days and below on three, the mean for the week being about the seasonal average. Three days were clear, three partly cloudy, and one was cloudy.

Wilson.—The first three days were partly cloudy with rain on Monday, Tuesday, and Wednesday. Friday afternoon there was a heavy rain, 1.44 inches, and some hail.

Woodson.—Light rains occurred the first of the week with rather low temperatures. There were some severe local hailstorms damaging fruit and gardens to some extent.

Wyandotte.—Showers occurred every day during the week, but, excepting Saturday, the weather was warm and generally pleasant. A thunderstorm and some hail occurred Friday afternoon.

MIDDLE DIVISION.

Barber.—It was good growing weather with the days warm and pleasant and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Barton.—The highest temperature was 83° on the 3d and the lowest was 42° on the 1st. There were thunderstorms on the 29th, 30th, and 2d. Two days were clear, three partly cloudy and two cloudy. Showers fell on four days.

Barton.—The highest temperature was 83° on the 4th and the lowest was 44° on the 2d. Saturday afternoon there was a heavy rain, 1.13 of an inch of rain fell.

Clay.—The week opened cloudy, the middle part was clear and the last two days were partly cloudy. Showers fell on Monday and Saturday, making a total of 0.31 of an inch.

Concordia.—The week was warm and showery with the days warm and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Cunningham.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Ellinwood.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Hays.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Macksville.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool and the nights cool. Rain fell the first two days, making a total of 0.91 of an inch. There was a thunderstorm on the 29th.

Medicine Lodge.—The days were cool

Kansas City Live-Stock Market.
Stock Yards, Kansas City, Mo.,
May 7, 1906.

The liberal run of 38,000 cattle last week is followed to-day by 10,000 head. Trade was most healthy last week, considering the heavy proportion of beef steers included, and prices generally advanced 10@20c. Outside markets have moderate runs to-day, so that some Chicago orders were filled here, and the market on killing cattle was 5@15c higher. Bulk of the beef steers coming are plain, short-fed kinds, the scarcity of good to choice ones still continuing. Top was \$5.65 last week, although the limit on prime steers is around \$6. A few droves were steers at around \$6. A few droves were hands, but they generally lost money, only one or two bunches showing a profit by going on. Top to-day is \$6.75, bulk of the plain to good steers sell at \$4.60@5.30, some choice heifers and yearlings mixed at \$4.90@5.30, frequent sales of good heifers at \$4.75, cows \$3.25@4.50, cannery and stock cows and heifers \$2.25@3.40, bulls \$3.25@4.25, veals \$4.50@6. Immense numbers of dairy calves are going on the Eastern markets now, a very weakening feature. Stockers and feeders sold higher most of last week, but closed up with the advance lost, and 1,000 more on hand than close of previous week. Dealers look for somewhat lower prices. Stockers sell at \$3.35@4.75, feeders \$4.25@5, a few cattle either way.

Hog supply is enlarging, 61,000 last week, and prices are weakening accordingly. Demand is extra strong, however, and the decline is gradual. Run to-day is 8,000 head, market steady to strong, top \$6.32½, bulk of sales \$6.15@6.27½, weights below 200 pounds \$6.10@6.25, pigs \$5@6. Net loss last week was 21c, whereas same week a year ago the price advanced 25c, easily understood when it is considered that the run same week last year was only 38,000 head.

More than 44,000 sheep and lambs arrived last week, but the bulk of them sold a quarter higher than preceding week. An extra large percentage of the supply coming is lambs, bulk of the woolen lambs selling at \$7@7.35, a big string to feeders at \$6.50, clipped lambs \$6.10@6.25, clipped wethers \$4.7@5.50, woolen ewes \$5.90, yearlings \$6.50. A few lots of Texas muttons sold last week at \$5.05@5.25. Run is 5,000 head to-day, market strong. Smaller runs are expected.

J. A. RICKART.

South St. Joseph Live-Stock Market.
South St. Joseph, Mo., May 7, 1906.

Local arrivals of cattle were about the same as a week ago, but the total for five leading points showed a decrease of about 11,000. It was clearly evident at the close of business last week that another run such as was recorded at the leading points one week ago, would prove to the disadvantage of the sellers; however, with the falling off reported the trade at once took on a more promising color. The demand proved active, and local prices were fully steady to strong, for the entire supply of medium to good dressed-beef styles of steers. There were no strictly choice beeves on offer, the best here being an uneven but long-fed and well-fattened steer weighing 1,300 pounds that sold at \$5.30. The bulk of fairly fleshed to good fat and light medium-fed steers sold at \$4.75@5.15; light weights of the cheaper-priced kinds sold actively and strong as the feeder trade was a lively competitor for anything that would do to go back to the country. Cows and heifers continue in very small supply and the market was steady and fairly active with some sales indicating a little strength. Stockers and feeders were actively wanted and the trade could use largely increased receipts in this line on the basis of \$3.75@4.50 for fair to choice yearlings and feeders.

As with cattle, the aggregate supply of hogs in sight showed a sharp falling off compared with Monday of the previous week. The market was soon established on a steady to strong basis as compared with the close of last week, and gained some strength as the forenoon advanced. The falling off in receipts is taken to indicate that the country is in position to resist breaks like that of last week and will to a certain extent dictate prices for the next few weeks. Hogs to-day sold within a very narrow range of prices, with tops selling at \$3.35, and the bulk at \$6.17@6.28½.

The receipts of live muttons were of very moderate volume all around. Locally a little less than 3,500 was made up entirely of lambs with the exception of one deck of ewes. The market was in strong, active demand for clipped stuff with lambs selling at \$6.15@6.25, top prices for the season for this class of stuff. Woolen lambs sold at \$7.25 and a few clipped ewes at \$5. The outlook is considered fair for the market of the week.

WARRICK.

Kansas City Grain Market.

Wheat.—No. 2 hard, 1 car 80c, 2 cars 79½c, 8 cars 79c, 5 cars 78½c; No. 3 hard, nominally 74½@78½c, 4 cars 77c, 1 car 76c, 2 cars 75½c; No. 4 hard, nominally 66@67½c, 3 cars 73c, 1 car 72½c, 6 cars 72c, 2 cars 71c, 2 cars 70c, 1 car 69c, 1 car 68c; Rejected hard, 1 car 65c, 1 car 63½c, 3 cars 63c, 1 car 62½c, 1 car 62c. No. 2 red, nominally 88@90c, 1 car 88½c; No. 3 red, nominally 85@88c, 1 car 88c; No. 4 red, nominally 70@85c, 1 car 80c, 1 car 73c; No. 3 spring, 1 car 76c.

Corn.—No. 2 mixed, 11 cars 47c; No. 3 mixed, 3 cars 47c, 2 cars 46½c; No. 4 mixed, nominally 45½c; No. 2 yellow, 4 cars 47½c, 5 cars 47½c, 1 car 47c; No. 3 yellow, 2 cars 47c; No. 2 white, 1 car 47½c, 9 cars 47½c; No. 3 white, 4 cars 47c; No. 4 white, 1 car 45½c.

Oats.—No. 2 mixed, nominally 32@32½c; No. 3 mixed, nominally 31@31½c; No. 4 mixed, nominally 30@30½c; No. grade, 1 car red 28c; No. 2 white, nominally 33½@34c, 4 cars 33½c; No. 3 white, nominally 42½@33½c, 1 car 33½c, 3 cars 33c, 1 car color 32½c; No. 4 white, nominally 31½@32c.

Rye.—By sample on track here at

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
Kansas Farmer Co.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., Topeka, Kans.



Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

CHOICE D. S. POLLED DURHAM BULLS—5 to 16 months old. C. M. Albright, Route 2, Overbrook, Kans.

HOLSTEINS—One yearling bull, extra choice, H. B. Cowles, Topeka, Kans.

FOR SALE—At the sale pavilion, Ottawa, Kans., Saturday, May 12, 1 p. m., by the breeders of Franklin County, 45 registered Shorthorn cattle, 20 bulls and 25 females. Farmers wanting a good young bull or females would do well to attend this sale. We do not expect fancy prices, as the cattle have had no special fitting. C. F. Wolf, Manager.

A BUTTER-BRED Holstein bull calf—The best purchase for grade dairy herd. See report Santa Fe Dairy Educational Special. Start right in your breeding. Sixty-five head to choose from. Geo. C. Mosher, Hillcrest Farm, Greenwood, Neb.

REGISTERED HOLSTEINS and Jerseys of best milk and butter families. Youngsters at reasonable prices. Burton & Burton, Topeka, Kans.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts-burn 3rd 185305. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

FOR RED Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

GALLOWAY BULLS—head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGREE SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rentz, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruikshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

FOR SALE Five pure-bred yearling Short-horn bulls. Will be pedigreed in name of buyer; sired by Teddy Roosevelt 19274. Good, useful bulls at living prices. Henry Haub, Whiting, Kans.

Kansas City: No. 2, 55@57c; No. 3, 53@54c.

Barley.—No. 3, 1 car 42½c; 1 car 42c. Flour—Steady, but dull. Following are the quotations: Hard winter patents, \$385@4.10; straights, \$3.70@3.85; clear, \$3.35@3.50; soft winter patents, \$4.30@4.60; straight, \$3.85@3.95; clears, \$3.10@3.35.

Corn-meal—Dull, but steady. Country, \$1.03 per cwt., sacked.

Corn-crop—Still draggy. Country, 92c per cwt., sacked.

Bran—Slow sale and lower. The quotations: Mixed feed, 90@91c; straight bran, 82@90c per cwt.; shorts, 98c@1 per cwt.

Flaxseed—Receipts, none; same time last year, none. Unchanged at \$1 per bushel, upon the basis of pure; in carlots, to arrive, \$1.

Cottonseed-meal—At all points in Kansas and Missouri, taking Kansas City rates, \$27.75 per ton in carlots.

Castor Beans—In carlots, \$1.35 per bushel.

Ground Oil-cake—Carlots, \$27.50; 2,000-pound lots, \$28; 1,000-pound lots, \$15; 100-pound lots, \$1.

Seed—Timothy, \$2.25@2.60 per cwt.

HORSES AND MULES.

FOR SALE—A good black heavy-boned Jack. Price, \$250 if sold soon. Do not write but come and see him. I also have others for sale cheap. Address Joseph Pilzinger, Box 14, Olmitz, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 60 Imported and American Bred Pedigree draft stallions and 20 coach stallions, 40 jacks given to one-half the regular price. Time given, will take part trade. Write for bargains.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of jacks and jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

SWINE.

CHOICE BERKSHIRE BOARS FOR SALE—Of the best breeding and from 125 to 240 pounds in weight. G. D. Willems, Inman, Kans.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kansas.

AGENTS WANTED.

Wanted—Gentleman or lady with good reference, to travel by rail or with a rig, for a firm of \$250,000 capital. Salary \$1,072 per year and expenses; salary paid weekly and expenses advanced. Address with stamp, Jos. A. Alexander, Topeka, Kans.

HELP WANTED.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

SEEDS AND PLANTS.

NICE RE-CLEANED ALFALFA SEED FOR SALE. Guaranteed pure; \$8 per bushel, H. L. Heaton, Oberlin, Kans.

ONE DOLLAR will buy enough of McCauley's seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SEED CORN—Finch's pure-bred Silver King; weight, \$1.25 per bushel, ear or shelled. Address J. H. Glotfelter, Emporia, Kans.

PLANTS FOR SALE—Cabbage, Henderson's Early Summer, Succession, 30 cents per 100, \$2.50 per 1,000. Tomatoes, Early Dwarf Champion, Beauty, Stone, Matchless, 30 cents per 100, \$2.50 per 1,000. Sweet Potatoes, Yellow Jersey, Yellow Nansemond, 20 cents per 100; \$1.50 per 1,000. Red Jersey, Red Bermuda, Black Spanish Southern Queen, Vineless 25 cents per 100; \$1.75 per 1,000. F. P. Rude & Son, Box 67, North Topeka, Kans. Ind. Phone 4003.

MISCELLANEOUS.

VALUABLE Receipts for removing Freckles, Smallpox Pits; also Liquor Cure. All three, 25c. WARD ECKLER CO., Box 271, Davison, Mich.

NOTICE—My application for a permit to sell intoxicating liquors, according to law at 115 E. 5th St., in the 2d ward of the City of Topeka, is now on file in the office of the Probate Judge of Shawnee Co., Kansas. The hearing of the same is set for May 26, 1906, at 9 o'clock a. m. C. R. Hoyt.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; \$8 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kans.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$7.50 to as high as \$155.50 per month. Wanted—400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 per week. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 128 State St., Chicago Ill.

red clover, \$9@12 per cwt.; alfalfa, \$10@13 per cwt.; cane, 68@70c per cwt.; Kafir-corn, 80@82c per cwt.; millet, German, 80@90c per cwt.; common, 75@80c per cwt.; buckwheat, \$1.25@1.40 per cwt.

Broomcorn—Quotations: Choice green, self-working, \$85; good green, self-working, \$80; slightly tipped, self-working, 75c; red tipped, self-working, \$65.

Hay—Choice prairie, \$10.50@11; No. 1 prairie, \$9.50@10.25; No. 2 prairie, \$8@9; No. 3 prairie, \$5.50@7.50; choice timothy, \$13@13.75; No. 1 timothy, \$12@12.75; No. 2 timothy, \$10.50@11.50; No. 3 timothy, \$9@10; choice clover mixed, \$12.50; No. 1 clover mixed, \$11.50@12; No. 2 clover mixed, \$8@9; choice clover, \$12.50; No. 1 clover, \$11.50@12; No. 2 clover, \$10@11; wheat and oat straw, \$5.50@6; choice alfalfa, \$13.50@14; No. 1 alfalfa, \$12@13; No. 2 alfalfa, \$10@11.50; No. 3 alfalfa, \$7@9; packing, \$3.50@5.

When writing our advertisers please mention this paper.

REAL ESTATE.

GOVERNMENT LAND and others cheap and fertile. Described free to annual subscribers. Farm and Ranch, \$1 per year, Sheridan Lake, Colo.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Money to Loan

On Eastern Kansas Real Estate

Semi-annual, or annual interest, five, seven, or ten years time, with privilege of payments at any interest period.

No Delay in Furnishing Money

Merriam Mortgage Company

Columbian Bldg., Topeka, Kansas

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I havent. Write me. I can fix you out. Wm. Green, P.O. Box 968, Wichita, Kans.

LAND FOR SALE
in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FOR SALE AND EXCHANGE
Merchandise and City Property, Kansas and Texas Lands. If you want any thing in this line write us. Quisenberry & Carlson, Marion, Kans.

FOR SALE CHEAP—Fine 320 acre farm, five miles north of Olmitz, 260 acres under cultivation, 60 acres pasture, 7 acres alfalfa, nice orchard, plenty of good water, good improvements and on rural free delivery, telephone in house. Reasons for selling, wish to quit farming. Will sell cheap if sold this months. Address James Pitzinger, Route 1, Olmitz, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, beautiful lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price, \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

160 ACRES—ALL BROKEN—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—ALL FENCED—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Lawrence, Kansas.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentiss, 156 Wabash Ave., Chicago.

FOR SALE—Choice fruit ranch, 20 acres near Santa Fe, New Mexico; apple orchard, full bearing. Splendid house, complete in every particular. Finest climate in the world; high "ice" for fruit. Small first payment takes it. Write to-day to owner W. H. Wise, Santa Fe, New Mexico.

320 ACRES, 6 miles from Emporia; 6 room house, barn 30 by 36, cattle-shed 24 by 40; good orchard and other fruit, 70 acres cultivated; 300 acres can be plowed or mowed; watered by wells and creeks; one mile to school. Price \$28 per acre. Can give immediate possession. Hurley & Jennings, Emporia, Kans.

FOR SALE—Coal land, farms, and timber. The man to get a home. Campbell, box 1452, Ark. Real estate man need not apply.

EXCELSIOR GE—All kinds of properties for trade or exchange. Also large lists of farms for sale. If any of this kind interests you write us at Minn. & St. Louis, Florence or Salina, Kansas. Garrison & St. Louis.

FOR SALE—320 acres in Kiowa Co., 80 in wheat, 200 in the place. Six miles from county seat. C. W. Phillips, Greensburg, Kans.

Close to good town, very good growing crops, at \$17 per acre. Other good farms with crops. Missouri hill land for sale. Western 50 to 75¢ per acre. Write or come in for a way of bargains in city of Wellington, Kans.

For sale farms, at prices from \$24 up, stating exactly what you send description. The Nordstroms, Clay Center, Kans.

FAIR within two miles of good new house, barn, stables, all bottom land, alfalfa land, two artesian wells, one eat barn; good orchard, good for any kind of crop; good fish pond near the house with plenty of fish. J. Baldwin, Arlington, Kans.

FOR SALE—The Dean Bartlett ranch, consisting of 2,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

FARMS WANTED

Will the owner of a well improved productive farm kindly communicate full description, price and terms to the undersigned. Cash will be paid in place suits. Possession to be given in the fall. Address Box 983, Minneapolis, Minn.

Rooks County Land

Where Wheat, Corn, and Alfalfa grow to perfection. 37,500 acres fine farm land for sale. For list and county maps address, C. H. DEWEY, Stockton, Kans. (R. R. fare refunded if you buy of me.) Mention Kansas Farmer.

FOR SALE Farms—Bargains; 500 farms, stock rauches. Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Kans.

FOR SALE Farm 2,160 acres, 570 acres in wheat, 1,800 can be farmed. I also have 150 steers, horses and outfit. Will sell at a bargain. C. W. Phillips, Greensburg, Kans.

FOR SALE 640-acre ranch, 4 miles from Stockton, Kans.; big bargain of 320 acres at \$8 per acre. Write STEVENS & RUBY, Stockton, Kans. Mention Kansas Farmer.

A CORN AND ALFALFA FARM.
FOR SALE One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address M. E. Beall, Woodruff, Kans.

640 acres, half in cultivation, 150 acres in wheat, half to buyer, 150 acre spring crop, one-fourth to buyer, well, mill-tank, grove; \$11 per acre; all smooth, best of soil, 5 miles to market.

Oakley Land and Investment Co., Oakley, Kansas

NORTON COUNTY LAND

We handle Norton County Lands, where alfalfa, corn and wheat is raised successfully. Norton County lies in the middle west, where we do not have drouths or hot winds. Write me for full particulars.

J. W. Bressler, Clayton, Kansas

IF YOU WANT A HOME
Write HAYES, "The Land Man," Drawer K, - - Almena, Kans

HOBBS & DETWILER
Real Estate Dealer Smith Center, Kans.

We handle Smith County Lands, located in the best corn county in Kansas. Write us for full particulars and complete land list.

160 ACRE BARGAIN

160 acres, four miles from Centralia, Kans., 120 acres in cultivation, 16 acres pasture, 24 acres meadow, some fenced hog tight, good house, good barn, good peach and apple orchard. A fine home. Price, \$7,500; incumbrance, \$2,500 at 6 per cent. Land lays flat.

HURLEY & JENNINGS, Emporia, Kansas.

Hurley & Jennings' Land Bargains

For Sale—40 acres improved orchard, 4-room house and stable, 3 miles from College of Emporia, for \$1,200, on terms if sold at once.

HURLEY & JENNINGS, Emporia, Kansas.

Why Do So Many Men Toil For Others.....

Helping enlarge their bank accounts, when each and every man, can become a land owner by corresponding with H. P. Fitzgerald, who will sell you land for \$5 an acre, which will produce 30 bushels of wheat and 40 bushels of corn per acre. One crop pays for the land. Don't wait. Write today to H. P. Fitzgerald, Jamestown, Kans.

GEO. M. NOBLE & CO.
Real Estate, Loans, Insurance.

Some Special Farm and City Bargains.

435 Kansas Ave., Opposite Postoffice, Topeka, Kans.

The Wonderful Ozarks

Present safest and best opportunities for investment. Our paper tells all about resources, farming, timber, mineral lands. Copy free.

OZARK COUNTRY,
SID Whinwright, St. Louis.

Watch Tacoma Grow!

Population, 1900, 37,714
Population, 1900, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

FARMERS!

There's Land Waiting For YOU In NEW ZEALAND

The Paradise of the Pacific; Sixteen Days Steam from San Francisco

THERE IS ROOM FOR THOUSANDS OF SETTLERS

Rich Soil. Abundance of Water. No Droughts. No Snow-bound Winters. Mild and Equable Climate. A Land of Peace and Plenty.

New Zealand's WEALTH Per Head of Population is the Highest in the World.

ITS DEATH RATE IS THE LOWEST IN THE WORLD.

Government land is obtainable on easy terms, perpetual leasehold or freehold. Government assistance to new settlers. State loans to farmers at low rate of interest.

New Zealand is a magnificent dairy-land, meat-raising, lumber and wool-growing country. Last year the produce of the farms of New Zealand totaled a value of one hundred million dollars. New Zealand's butter, wool and frozen mutton fetch the highest prices in the world's markets.

New Zealand Railways are owned by the Government. Cheap freight and passenger rates. Government and Municipal ownership of public utilities. Government Trust Offices, Insurance, Savings Banks, etc.; Government Sanatoria and Hot Mineral Water Spas.

New Zealand is a region of grand and novel scenery. It is largely visited by American tourists who escape the rigors of winter.

A land of splendid sport. Trout-fishing and Deer-stalking. Thousands of miles of angling waters carrying the biggest trout in the world.

It is SUMMER in New Zealand when WINTER in America. New Zealand's summer is cool and enjoyable for traveling. Comfortable hotels. Good Transportation. Cheap rates.

YOU WILL FIND OUT ALL ABOUT NEW ZEALAND

by dropping a postcard asking for information and literature to

T. E. DONNE, Superintendent, Government Department of Tourist and Health Resorts, Mail Steamers from San Francisco to New Zealand Every Three Weeks.



WE GIVE YOU TEN YEARS TIME

in which to pay for

Farm and Ranch Land in Kansas, Nebraska and Colorado

All you need to make the land pay for itself and also make you and your family independent for life. Low Prices. Write for full information. FREE.

THE UNION PACIFIC LAND CO., Department F, Omaha, Nebraska.

Getting What You Want

We all want a pleasant and prosperous home. This we have ready for you. We are subdividing and selling the splendid Los Molinos Ranch of 40,000 acres in the famous Sacramento Valley of California.

We have every combination to insure you success. Soil is smooth and richest sedimentary deposit. Climate so mild every month can be used for planting and growing crops and fruits.

Water shortage unknown, a dry season unknown.

All who see our lands are enthused. Come and look over our crop, garden and fruit lands. You will locate with us if you do.

Send for our booklet. Write for particulars. It will pay you. Address LOS MOLINOS LAND CO., LOS MOLINOS, TEHAMA CO., CALIFORNIA.

BEST LAND IN TEXAS

In Rainbelt, \$8 to \$20. No hot winds, floods or blizzards. Other land \$2 to \$7. List free. HILAND P. LOCKWOOD, 452, San Antonio, Texas.

CENTRAL KANSAS LAND

Where alfalfa, corn and wheat are the "big three" 800 acres wheat land, 9 miles from Russell, at \$12.50 per acre, half 120 acres wheat land; 320 acres in Lincoln county at \$12 per acre; 640 acres all river bottom in Lincoln County at \$40 per acre. Well improved. Minx & Bower, Lincoln, Kans.

Phillips County and Western Kansas

280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; my price \$25. 160 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 acre. W. B. Gaumer Realty Co., Phillipsburg, Kans.

Norton County

Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS, Almena, - - Kansas

Sheridan County Land

A choice section six miles from Hoxie, \$12.50 per acre. 320 acres, \$2,500. A well improved 800 acre tract, three miles from town, perfect land, \$15 per acre. Thousands of acres of northwestern Kansas land for sale at \$8 to \$15 per acre. Write for statistics showing the products of the County in the past years and our price list.

Sheridan County Land Co.

Hoxie, Kansas

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific Railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. THE DOWNS REALTY CO., Downs, Kansas.

CHICAGO GREAT WESTERN RAILWAY

MAPLE LEAF ROUTE

"The Right Road" BETWEEN Chicago, St. Paul, Minneapolis, Des Moines, St. Joseph, Kansas City, Council Bluffs and Omaha.

EQUIPMENT RIGHT, TIME RIGHT, SERVICE RIGHT, IT'S ALL RIGHT.

J. P. Elmer, G. P. A., St. Paul, Minn.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the KANSAS FARMER one year, both for only \$2.50. Address, THE KANSAS FARMER CO., Topeka, Kans.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio

Quick.

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — Large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

Crimson Wonder 38755 Herd

Will have something fine to offer. Can furnish trios not skin sired by Crimson Wonder 38755 and Kerr's Champion 28355.
Mr. & Mrs. Henry Shrader, Wamego, Kas.

Egypt Valley Duros

Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

Orchard Hill Herd of Duroc-Jerseys.

Summer and fall boars and gilts for sale, sired by Kanhol Chief, grandson of Ohio Chief. Gilts bred to Nortons' Top Notcher by Tip Top Notcher.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled

A few fall boars by State Fair prize winners and Red Polled bulls for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

Square Deal Stock Farm

Wm. D. Calder, Prop., Bancroft, Kans.
We have for sale at \$20 each, two Poland-China boars, sired by Square Deal 36749 by Highland Chief Jr. 29364, dam Daisy Calder (37343) by Calders Perfection (35581.)

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 3d, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER,
Frankfort, Kansas.

**Highland Herd
of Duroc-Jersey Swine**

Sows by such noted boars as Improver II 13365, Eclipse 15439, Hunt's Model and Afton by Oom Paul 2d. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 2d. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

STEELE'S DUROCS

I have eight boars of December farrow, weighing about 75 or 80 pounds, that are Paul Wonder 26255, by Oom Paul 11 17679. This is a good herd boar material, and the price is right. I shall have for future delivery boars by Steele's Model 10765 by Chief Orion 28817, and a few by Paul Wonder. Please write me your wants.

C. G. STEELE, Barnes, Kansas

Poland-Chinas

**A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.**
We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88203. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 303768 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

Axlines
Poland-Chinas and Barred Plymouth Rocks

Eggs \$1 per sitting. Choice fall pigs, either sex.

E. E. AXLINE Oak Grove Missouri

John Bollin Route 5
Leavenworth, Kansas

Breeds and sells popular... Poland-Chinas

The State and World's Fair winning boars Nemo L's Duke and The Pickett in service. Bred sows and serviceable boars for sale.

Oak Grove POLAND-CHINAS...

Nemo L's Duke, prize-winner and sire of winners and Sir Darkness out of Darkness and by Chief Perfection 2d in service. A few boars for sale

Gus Aaron,
Route 5 - Leavenworth, Kansas

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAGUIRE, Hutchinson, Kans.

**Feature County Herd of
POLAND-CHINA SWINE**

12 fall boars for sale out of Chief Tecumseh 2d and Corcoran sows, and sired by King Perfection by Royal Peacock. I will sell them right.

R. H. WEIR, Route 3, Oberlin, Kans.

**ROME PARK POLAND-CHINAS
and BERKSHIRE BOARS**

A few yearling and winter and spring boars in special offer. Write at once. Also gilts, gilts and pigs of either sex. Would take pleasure in showing them to you.

**T. A. HUBBARD, (County Treasurer Office).
Wellington, Kans.**

CEDAR GROVE HERD

Of pure-bred POLAND-CHINA HOGS
We will have some bargains this season to offer the public. J. A. Hebrew, Stockton, Kans.

Mention Kansas Farmer when you write.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kans.

C. F. Hutchinson, Bellaire, Kansas
Thirty Years a Breeder of
Poland-China Swine

We raise the big fellows that farrow large litters. The kind that fills the pork barrel. Write us for list of our wins at Nebraska and Kansas State Fairs. Our herd boar Bright Look weighs 1,000 pounds in show condition. Stock for sale. If you want the big kind write us.

**Spring Creek Herd of
POLAND-CHINA SWINE**

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

**G. M. Hebbard,
Route 2, - Peck, Kansas**

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

**POLAND-CHINA
Bred Sows**

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

Chester-Whites

O. I. C. SWINE

Choice young stock of both sex for sale at very low prices.

S. W. ARTZ, Larned, Kans.

**World's Fair
CHESTER-WHITE HOGS**

Short horn cattle, Oxford sheep and Peafowl. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peoria, Mo.

O. I. C. Hogs

Scotch Collie Dogs

B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragmire Wonder and Branderane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

**Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.**

**PRIZE WINNING
O. I. C. SWINE**

Boars closely related to our Worlds Fair Winners ready for buyers.

Headquarters for up-to-date Chester-Whites

O. L. KERR, Independence, Mo.

Berkshires

CEDAR LAWN BERKSHIRES My sows are sired by Ellin's Prime 64778, and Berryton Duke 72946. Boar at head of herd, Jonist topper 76277.

Wm. McAdam, Netawaka, Kans.

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Compton 89195.

W. J. Grist, - Osawkie, Kans.

Ridgeview Berkshires

SOLD OUT except one yearling boar. Get in your order for pigs of spring farrow. One herd boar for sale.

**MANWARING BROS.,
Route 1, Lawrence, Kan.**

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds.

40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kans.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

**QUROLLO'S
QUALITY Berkshires**

Herd Boar, Lord Bacon 87145

Strong boned, growthy, well finished pigs at low prices for quality. Also S. C. B. Leghorns of high quality. Take electric line from Kansas City, Mo. Home phone 292.

James Quroollo, Independence, Mo.

**KNOLLWOOD
BERKSHIRES**

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 0134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$160 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus

**Aberdeen-Angus
Cattle**

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kans.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

**Address
PARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kans.**

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

**The Eacker-Brown Farm Company
Delphos, Kansas**

Breeders of English Red Polled Cattle. We have three coming 2-year-old bulls for sale at a bargain. Write for description and prices. Mention the Kansas Farmer.

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens.

Address, S. C. BARTLETT,

Route 5. - - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blooky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

Red Polls

COBURN HERD OF RED POLLED CATTLE
Herd now numbers 115 head. Young bulls for sale.

**GEO. GROENMILLER & SON,
ROUTE 1, POMONA, KANSAS**

**RED POLLED CATTLE AND
POLAND-CHINA SWINE.**

Best of breeding. Write or come and see

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning RED POLLED CATTLE.

Servicelike bulls for sale at prices to sell them.

WILKIE BLAIR, Route 5, Girard, Kansas

Herefords**Registered Herefords**

Individual merit and choicest breeding. Dale Dupl. cat 2d at head of herd. Correspondence solicited.

A. JOHNSON, - Clearwater, Kansas

Vermillion Hereford Co., VERMILION, KANSAS.

Boatman 56011 and Lord Albert 121557 head of herd.

Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

CANEY VALLEY

Herefords

Beau Donald 4th 8614

Shorthorns

Shorthorns and Poland-Chinas
FOR SALE—40 sows and gilts bred; 12 bulls, 50 cows, 55 heifers, full red. Write or see me at once for bulls.
George Channon, Hope, Kansas

M. C. VANSELL Muscotah, Kansas
Breeder of Shorthorns, Poland-Chinas and Barred Plymouth Rock chickens.
For sale a choice, pure Scotch bull, color red, a show bull.

The Biggest and Best Herd of Shorthorns
In Southwestern Kansas, owned by
I. A. MEAD,
Kingsdown, Ford County, Kansas.
For Sale—Bulls and females. Inspection invited.

MEADOW BROOK SHORTHORNS
Herd headed by Baron Goldsmith 224633, by The Baron 121327; females bred to him and choice young bulls for sale.
T. C. KINGSLEY, Dover, Shawnee County, Kans.
Railroad Station, Willard, Kans. Long Distance Telephone

Registered Shorthorn Cattle
Duroc-Jersey Swine
Also choice B. P. Rocks. All Stock fashionable bred, and choice individuals. For Sale—One July 27, '06 bull; price, \$100. Eggs, Bradley mating, \$2 per 15; range eggs, \$1.50 per 15; \$5 per 100.
G. E. Newton, Whiting, Kansas
(Successor to Newton Bros.)

Rocky Hill Herds
Shorthorns and Percherons.

In special offer a number of Scotch and Scotch-topped females bred to Sultan, a good Scotch bull. Prices reasonable.

J. F. TRUE & SON, Perry, Kans.
R. R. Station Newman, 12 mi. east of Topeka.

Ashcraft
Shorthorn Herd

The Scotch Victoria bull (Scottish Minstrel 234970) at head of herd.

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by 1mp. Prince of Perth and out of Goldfinch, full sister to the champion Lavender Viscount in service. Crucshank and Crucshank-topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, - - - - - Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds

of Shorthorns and Berkshires
Baron Rupert 248267 at head of Shorthorns. Young Scotch-topped and Bates bulls for sale. Royal Star 72663 and Lee Star 88238 sired by the great Champion Lord Lee 61198 at head of Berkshires. Choice early fall bulls and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1, - - - - - Yates Center, Kans.

Shorthorns at Auction
May 16, 1906

Will sell my entire herd including cows and heifers got by Master of the Grove 161374.

J. W. Baker
Strong, Chase County, Kansas

Holsteins

C. F. STONE, Peabody, Kansas,
Breeder of
PRIZE-WINNING HOLSTEINS
Young Bulls and a few young Cows and Heifers for sale.

When writing our advertisers please mention this paper.

Tamworths

Lincoln Park Herd
of pure-bred Tamworth Hogs
Stock for sale. Write to E. L. Lindner and F. L. Waterman, Clay Center, Kans.

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Auctioneers

Col. T. E. Gordon
Live-Stock Auctioneer

Waterville, - - - Kansas
Reference: Those for whom I have sold.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.

Z. S. BRANSON
Live Stock Auctioneer
Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values
Terms reasonable. Inquiries cheerfully answered.

John Daum Nortonville, Kansas
Live Stock Auctioneer

Fine stock a specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

CHILlicothe
Auction School

OPENS JULY 9, 1906

Instructions in nine branches of Auction Sales, including Live Stock Judging, by seven teachers. Write for particulars and terms.

HARRY W. GRAHAM, Pres., Chillicothe, Mo.
Live Stock Auctioneer

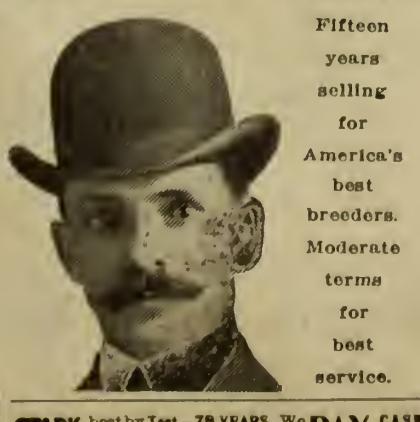
R. L. HARRIMAN
AUCTIONEER
Bunceton, Mo.

First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer
MARSHALL, - - - MISSOURI

Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.



beat by Test—75 YEARS. We WANT MORE SALESMEN PAY CASH
Stark Stark Nursery, Louisiana, Mo.; Huntsville, Ala.

Horses and Mules**200 HEAD**

Imported German Coach, Percheron and Belgian Stallions on Hand.

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.**REGISTERED PERCHERONS.**

Coachers, Saddlers, Big Mammoth Jacks and Jennetts. Yaiti head of Percheron stud and King Jumbo at head of Jennett herd. More prizes won at Missouri State Fair 1904-5 than any other breeder.

S. A. SPRIGGS.

Westphalia, Kansas.

CHEYENNE VALLEY STOCK FARM PERCHERONS
Patsy and Keota Scoggan

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

ELDORADO STOCK FARM

A choice lot of imported and home-bred Percheron stallions and mares for sale.

E. J. HEWITT, Proprietor, Eldorado, Kansas

JOHN D. SNYDER,
Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

Horses and Mules

Do You Want to Buy a Jack?

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 16 hands high, 2 to 8 years old, to select from at our barns at Marlow, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. COOK & CO.

Marlow, Kansas Lexington, Kentucky

One Pair Black Percheron Mares

Eligible to registry, weight about 1,700 pounds

4 and 10 years of age.

One Black Percheron Stallion

Brilliant, 40160, 12 years old, and Monarch 151, 18 years old. Also 2 young Jacks, Spanish Mammoth breeding. Will exchange stallions or Jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Bavaria, Kansas

FIFTH TERM**JONES' NATIONAL SCHOOL**

Oratory

Davenport, Iowa

6th term opens July 22, 1906. All branches of the work taught. Students now enrolling in 13 states.

For Catalogues write Carey M. Jones, President

SEEDS THAT WILL GROW PLANTS

None better, even at the high prices. Special Bargains. SEEDS, 10¢ pds.

Annual Flowers, 10¢; 6 pds. Vegetables, 10¢. PLANTS, 6 Boxes, 25¢

Geraniums, 25¢; 6 Rosebuds, 10¢; 4 Peacockeas, 10¢. My raising prices will surprise you. Catalogue and postpaid Royal Glass Peanut Free.

A. C. Anderson, Columbus, Nebraska.

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1868, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write to stop the paper, and you are to make no charge for the three months' trial.

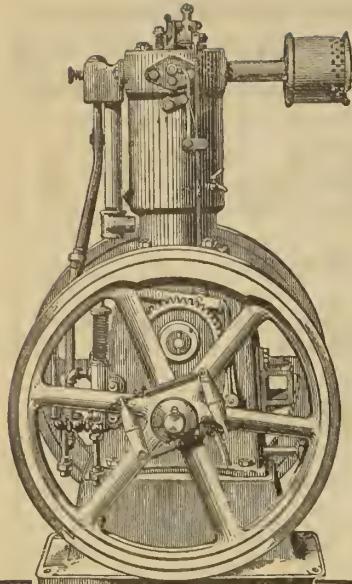
Name.

P. O.

World's Premium Seed Corn,**HOWARD COUNTY WHITE**

Awarded first and third premium at State Corn Show in St. Louis in 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address.

E. T. LONG, Fayette, Missouri



Gasoline Engine Superiority

When a man invests in a farm power, he owes it to himself to get the best that can be bought for the money.

The modern business farm can no longer be successfully operated without a power of some kind.

The best, most economical, and safest farm power is a gasoline engine.

The best engine is the

I. H. C. Gasoline Engine.

Why? Well, because it's so simple, easily kept in order and operated definitely.

It develops the full rated horse power and sustains it against the heaviest load.

It is safer, cheaper and more efficient than steam power.

It is adaptable to any and every use requiring a power.

Among its many uses may be named:

Shelling, Husking and Shredding Corn; Grinding Feed; Cutting Dry Fodder and Ensilage; Pumping; Sawing Wood; Separating Cream, Etc.

I. H. C. engines are made in the following styles and sizes:

Vertical, 2, 3, 5 Horse Power.

Horizontal, Portable and Stationary, 4, 6, 8, 10, 12, 15 Horse Power.

If interested in powers in any way, go to the International Local Agent and have him show you the I. H. C. gasoline engine, and supply you with catalogues, or write for further information.

**INTERNATIONAL HARVESTER COMPANY
OF AMERICA, CHICAGO, ILL., U. S. A.**
(INCORPORATED)

This Keeps Lightning Out Of Telephones



This picture shows our "No Risk" Lightning Arrester. Pull the knob and your telephone is absolutely cut out. The lightning cannot enter your house.

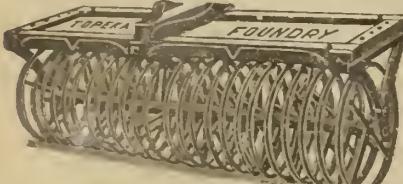
Simple of course. But absolutely sure because so simple. Pulling the knob connects the telephone with ground-wire—leaves line wire free and clean just switches the current. The knob pulled before a storm saves the phone, protects the house same as a lightning rod, avoids fire, insures safety for the family.

Book About It FREE

Our book sent to anyone free. Just send your name and address. It explains everything, tells how you can try the "No Risk" Lightning Arrester FREE, etc. Or send us \$2 and get the complete arrester. Fully guaranteed to work and protect as we say or money back. Reliable Agents wanted. One man sold 15 one day. Another 35 in 8 days.

W. E. ASHBY TELEPHONE CUT OUT CO.
111 Square Street, Charlton, Iowa.

DROUTH DEFIER



NEVER LOSE A CROP

If you use the Topeka Foundry Packer, Pack surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS

When writing mention Kansas Farmer



La Salle
Street
Station,
Chicago



Only one
on the
Elevated
Loop



Used by Rock Island-Frisco Lines

Have YOU ever been in CHICAGO?

If so, you know the extremely convenient location of La Salle Street Station.

If you are a stranger in the city, however, it is of great importance that you learn about this magnificent and comparatively new terminal, used jointly by Rock Island-Frisco Lines—C. R. I. & P. Ry. and C. & E. I. R. R.

It is nearest the heart of the city—closely adjoining the business section—within easy walking distance of State Street shopping center and all the principal hotels.

Another advantage of entering the city through La Salle Street Station is the second-story viaduct directly connecting the main waiting-room with the Elevated Railroad loop—you can reach the North, Northwest, West or South sides of the city by elevated trains for a five cent fare **without descending to the street**. You thus avoid the dangers and delays of the great, crowded city.

The Rock Island right-of-way into Chicago is elevated for more than eight miles out through the suburbs. Prompt arrival at Chicago terminal is thus assured. Englewood Union Station, seven miles out, affords ready access to southern suburbs—all through trains stop there.

Where you will land is an item to consider.

JOHN SEBASTIAN, Passenger Traffic Manager, Rock Island-Frisco Lines, CHICAGO and ST. LOUIS.

The Southwest Limited

was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts by the

Chicago, Milwaukee & St. Paul Railway

If you doubt the first fact compare the service of to-day with that before The Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p. m.; Grand Avenue 6.07 p. m. Arrives Union Station, Chicago, 8.20 a. m.

G. L. COBB
Southwestern Passenger Agent

907 Main Street
KANSAS CITY

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigreed and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, JR.
Manchester, Illinois

Drouth Proof White Kafir Corn

We have for sale 400 bushels of extra fine white Kafir-corn at \$1.25 per hundred, f. o. b. Jamestown, Kans. This seed has been carefully selected and is guaranteed to be of a superior quality. ED. FITZGERALD, Jamestown, Kansas.

6301
KAF

LIBRARY
OF THE
ILLINOIS

KANSAS FARMER

Volume XLIV. Number 21

THE RAILROAD RATE BILL PASSES THE SENATE.

After one of the most notable contests of its history, the U. S. Senate on last Friday passed the bill conferring additional powers upon the Interstate Commerce Commission. There were but three dissenting votes. The bill received several amendments after it came from the House, which body it had passed by a vote almost unanimous, there being but four opposing votes.

It is conceded that most of the Senate amendments strengthen the measure. The most prolonged contest was over the court-review amendment. It is believed, however, that this amendment but expresses and defines the constitutional authority to review the findings of the commission.

The principal purpose of the railroad rate bill passed is to permit the Interstate Commerce Commission to fix rates. The provision conferring this authority is found in the fourth section of the bill which amends section 15 of the Interstate commerce law so as to accomplish this result. That section directs the commission to investigate complaints of unjust and unreasonable charges on the part of the common carriers in the transportation of persons or property, or of regulations or of practices affecting such charges. It also authorizes an inquiry as to whether the rates or practices are "unjustly discriminatory or unduly preferential or prejudicial or otherwise in violation of the act," and in case any of these conditions are found to exist, the commission is empowered to determine and prescribe what will be the just and reasonable maximum rate, and what regulation or practice is just, reasonable, and fair. Further authority is given the commission to enforce its orders, and they are to go into effect within thirty days and continue in force for two years unless suspended, modified, or set aside by the commission or by a court of competent jurisdiction. Other powers conferred by this section are to apportion joint fares, establish through routes and maximum joint rates and prescribe their division, and to determine the compensation to be paid to shippers doing service for carriers.

Section 16 of the present law is so changed as to provide for an award of pecuniary damages to complainants found entitled, and in case payment is not promptly made in accordance with this award, the beneficiary is authorized to file suit in a United States Circuit Court to compel compliance. The finding of the commission is to be received as *prima facie* evidence of the facts in such suits, and the petitioner is absolved from all liability for costs. Another provision renders legal the service of the orders of the commission through the mails, and provides that these orders shall take effect thirty days after service unless suspended or modified by the commission or suspended or set aside by the courts. A penalty of \$5,000 for each offense in disobedience of the order is imposed, and the penalty is to accumulate at the rate of \$5,000 a day in case of continuous violation. Orders other than those for money payments are to be enforced by the Federal courts through writs of mandamus or injunction, and in case of appeal to the Supreme Court these cases are to be given preference over all others except those of a criminal character.

The bill was intended by the Senate so as to give the United States Circuit Courts jurisdiction to entertain suits brought to annul or change the orders of the commission, and to provide

against the granting of interlocutory decrees without hearing, and making appeals from such orders direct to the Supreme Court.

Other provisions extend the definition of the word "railroads" so as to make it include switches, spurs, tracks, terminal facilities, freight depots, yards, and grounds, and defines the word "transportation" so as to make it embrace cars and other facilities for shipment or carriage, "irrespective of ownership or of any contract," the intention being to make the railroads responsible for all special car service. It is made the duty of carriers to furnish special car service upon reasonable request.

Senate amendments include oil pipelines, express companies, and shipping-car companies under the head of "common carriers," and make them amenable to the requirements of the bill. Other Senate modifications prohibit the issuance of passes or the granting of special favors to one class of passengers over another, prohibiting railroad companies from transporting commodities produced by themselves; require such companies to put in switches at the reasonable request of shippers; prohibit the granting or acceptance of rebates, and reinstates the imprisonment penalty for violation of the law.

There are also changes in the law relative to the reports to be required of common carriers and a penalty of \$100 a day is imposed for failure to comply with the report requirement.

The commission is given access to the accounts of the companies affected by the act, but examiners are forbidden, under penalty of heavy fine and long imprisonment, from divulging the facts ascertained. Fines of \$500 for each failure to keep proper accounts is provided. A falsification of accounts is made punishable by fine and imprisonment.

Circuit and District Courts of the United States are given jurisdiction over all complaints by the commission on failure to comply with its orders, and such courts are required to issue writs of mandamus compelling such compliance.

The bill will now go back to the House, where the Senate amendments will be considered. These amendments are believed to make the bill a more effective measure than when it left the House. There may be some discussion of various provisions; but the two houses are practically agreed on the leading features of the bill. They will doubtless concur in a wise and effective measure which will soon become a law.

The opponents of the bill had no hope of defeating it when it should come to a vote in the Senate. Their tactics heretofore have been by repeated delays and postponements to prevent a vote until adjournment killed the bill. But for the persistence of President Roosevelt in centering public attention upon this important subject, the program of delay would probably have been again effective.

The tremendous influence of the President as the exponent and leader of the people finally became irresistible and prevailed. It is worthy of note that in their desperation the apostles of delay placed the management of the bill in the hands of a Democrat, and that nearly all of the minority Senators supported the President in the contest. In common with most other Western Senators, Senator Long, of Kansas, was heartily with the President, and was recognized as a leader in the contest, not only to bring the bill to a vote, but in favor of such amendments and such only as would give an effective measure.

The bill was intended by the Senate so as to give the United States Circuit Courts jurisdiction to entertain suits brought to annul or change the orders of the commission, and to provide

TOPEKA, KANSAS, MAY 24, 1906

Established 1863. \$1 a Year

SENATORS AND THE RATE BILL.

Following is the record of the vote in the Senate on the passage of the rate bill:

Yeas—Aiger, Allen, Allison, Ankeny, Bacon, Bailey, Berry, Beveridge, Blackburn, Bradedge, Bulkeley, Burkett, Burnham, Carmack, Carter, Clapp, Clark of Montana, Clark of Wyoming, Clarke of Arkansas, Clay, Crane, Cumber, Cullom, Daniel, Dick, Dillingham, Dolliver, Dryden, Elkins, Flint, Foster, Frazier, Frye, Fulton, Gallagher, Gearin, Hale, Hansbrough, Hemenway, Hopkins, Kean, Knox, La Follette, Latimer, Lodge, Long, McCreary, McCumber, McEnery, McLaurin, Mallory, Martin, Millard, Nelson, Newlands, Nixon, Overman, Penrose, Perkins, Piles, Rayner, Scott, Simmons, Smoot, Spooner, Stone, Taliaferro, Teller, Tillman, Warner, Wetmore—71.

Nays—Foraker, Morgan, Pettus—3.

The absentees were:

Messrs. Aldrich, Burrows, Burton, Depew, Dubois, Gamble, Gorman, Heyburn, Kittredge, Money, Patterson, Platt, Proctor, Sutherland, and Warren.

RIGHTS CONCERNING STREAMS.

EDITOR KANSAS FARMER:—I live at the Junction of the Big and Little Blue Rivers. My farm lies on both sides of the river. The lines cross the rivers, that is, the rivers are a part of the farm. Is the river in this case a public way and has any person a right to boat up and down the river through my farm if I forbid him? Our county attorney seems to think the public has a right to the river. Please publish the law on this point. It will be a benefit to others. J. L. RODKEY.

Marshall County.

The ordinance of Congress of July 13, 1787, providing for the government of what was then called the "Northwest Territory" including the country north and west of the Ohio River, declared it to be a fundamental principle, forever unalterable, that the navigable waters leading into the Mississippi and St. Lawrence, and the carrying-places between the same, should be common highways and forever free. To make sure of this provision it was declared in no less than eight subsequent acts of Congress, that all navigable waters in the Western States and Territories shall be public highways. These precautions may have been deemed necessary in consideration of the fact that, according to the Common Law, a navigable stream usually meant only that part of the stream in which the tide ebbs and flows. The acts of Congress made applicable the Civil Law definition which extends the use of the term "navigable" to "any stream capable of and useful for commercial navigation."

So great pains on the part of Congress to declare the rights of the public on Western streams, capable of and useful for commercial navigation, almost implies the non-existence of those rights on streams not capable of commercial navigation.

The uncertainty in the minds of some with reference to these matters probably results from confusing the doctrine of riparian rights, namely, rights to the use of the water in a stream for domestic and industrial purposes with rights of navigation. Riparian rights apply to all streams, both great and small.

There are streams which are not navigable under any accepted definition from which no man has a right to exclude other persons. Thus the Kansas River is not used nor is it capable of use for "commercial navigation."

but the land under this river belongs to no individual; the surveys of the United States extended only to the banks or to the water's edge, and the fractional subdivisions bordering on the river were sold as such. Streams on which the surveys thus terminate are called "meandered" streams. Some of them are at times destitute of surface water, but their beds are "common" property, owned by the public. The upper Arkansas River is a prominent example of this class of streams. Streams not meandered were sold with the land, and control of their occupancy goes to the owner to the same extent as if there were no water flowing over the land owned. It is true that the owner of the land is bound under the law of riparian rights to abstain from wasting the water; he may not divert it from its natural channel to the hurt of others either above or below him on the stream, but he has the same right to protect his property from trespass or intrusion as if riparian rights did not exist. He may extend his fences across the stream, and may resort to all means of exclusion that he might use as to any other part of his possessions.

The Blue River was meandered only to the south line of Marshall County. North of that line the land under the streams was sold by the Government, and is subject to control by those who have succeeded to its ownership.

EAVESDROPPING.

EDITOR KANSAS FARMER:—Will you please answer through the columns of your valuable paper the following questions: What is the law regarding eavesdropping in Kansas? Is it punishable? If so what is the penalty? Is "rubbering" over the telephone considered the same as eavesdropping?

Cloud County.

J. T. S.

Flagrant and persistent eavesdropping may amount to a disturbance of the peace, an offence punishable under the laws of Kansas which provide, chapter 100, section 318, as follows: "Every person who shall willfully disturb the peace of any person, family, or neighborhood, shall upon conviction thereof be fined in a sum not exceeding one hundred dollars, or by imprisonment in the county jail not exceeding three months."

The Supreme Court held, 35 K. 387, that where the conduct complained of is directed primarily against some person other than the prosecuting witness and his family, and is wrongful and wilful, and the natural and necessary consequence of such conduct is to disturb the peace and quiet of the prosecuting witness and his family, the accused may be convicted.

Eavesdroppers are defined in the criminal law to be such persons as wait under walls or windows or the eaves of a house to listen to discourses, and thereupon to frame mischievous tales. The common-law punishment for this offense is fine and finding sureties for good behavior, as stated by Blackstone.

The term eavesdropping may well be applied to the detestable practice of listening to others' conversation on a party-line telephone. The sense of degradation which every right minded person must feel after such eavesdropping.

If, indeed, any right minded person were ever guilty of so detestable a practice—ought to be sufficient punishment to prevent repetitions of the act. Whether the courts would hold such offense punishable as a disturbance of the peace would probably depend upon the degree of disturbance inflicted. It is easily believable that such acts

might become so grievous as to be punishable at law.

On most party telephone lines there is a general call to which all may and should answer. This general call has many uses. On some lines frequented by tramps or other undesirable persons, the general call has been used to give notice all along the line of the presence of such persons. So, too, interesting news is communicated. A case was reported a few months ago in which the general call brought quick and abundant help in a time of need. A widow was disturbed at night by a drunken man who insisted on seeing her. She sent a general call along the line and stated the case. In a few minutes horses' feet were clattering over the road and neighbors were arriving armed with rifles, shot-guns, revolvers, pitchforks, rakes, neck-yokes, single-trees, etc.

The ethics of the telephone should confine all listening to messages intended for others strictly to those announced by the general call.

BURTON.

The Supreme Court of the United States rendered a decision last Monday sustaining the finding of the lower court in the case against Senator Burton, of Kansas, charged with receiving money for appearing before the Post-office Department in the interest of a St. Louis "get-rich-quick" concern, while holding the office of a Senator of the United States.

Such practice is forbidden by a law of Congress.

Five years ago J. Ralph Burton had been elected to the United States Senate. He had ability, ambition, opportunity. To-day he may well say that, without the fine of \$2,500 and the six months in jail to which he has been sentenced, his punishment is great. Ambition is shattered, opportunity gone.

It has been pleaded in extenuation that others have committed like offenses. Perhaps Burton is unfortunate in being the first victim of the awakening determination of the country to purge corruption out of high places of trust.

The court has granted sixty days in which to make application for a rehearing. This with other delays may carry the case over to near the end of Mr. Burton's term. It is intimated, however, that the Senate will declare his seat vacant. While drawing his salary as a Senator, he has not performed the duties of a Senator since his first conviction many months ago.

MEASURING HAY IN THE STACK.

EDITOR KANSAS FARMER:—Please give me the rule in THE KANSAS FARMER for measuring prairie hay in the stack. Also the number of cubic feet in a ton of prairie hay in the stack.

IVERSON NITTS.
Montgomery County.

G. E. Goddard, Cochrane, Alta Vista, gave to the Nor-West Farmer the following rule: "Add the width to the overthrow, divide by 4, square the result, multiply by the length and divide by 512. This will give you the number of tons after the stack has settled for thirty days. The advantage of this rule is that the shape of the stack does not matter. By adding the average width to the average overthrow, you practically put the tape round the stack. Taking a fourth of this gives you one side of the square, which, multiplied by itself, gives the square feet in the end of the stack. This again multiplied by the length, would, of course, give the number of cubic feet in the stack, 512 of which is the general measurement allowed to a ton here thirty days after putting up; or 420 cubic feet for hay that has been up over six months."

Roop's Commercial Calculator speaks of the number of cubic feet in a ton of hay as follows:

"The quantity of hay in a mow or stack can only be approximately ascertained by measurement. Good timothy hay, when thoroughly settled, will take about 350 cubic feet to make a ton. If only partly settled, from 400 to 450 cubic feet; while new hay will take 500 cubic feet and over."

ROAD WORK QUESTION.

EDITOR KANSAS FARMER:—Please answer the following question through the columns of the KANSAS FARMER: If a man works out his poll tax in an outside district and receives a receipt for the same can the road-overseer in his own district compel him to work out the tax again the same year?

Saline County. O. R. O.

The new road law enacted by the last Kansas Legislature places the roads of

the township under the control of the township board and requires such board to receipt for all labor performed on the roads. This new law specifically continues in force the old law which requires that each able-bodied man between the ages of 21 and 45 years do two days' work on the road each year. These two laws are not neatly joined together. The old law requires the road-overseer to receipt for work done in his district. The new law authorizes the township board to divide the township into not more than four road-districts, and to appoint an overseer to direct the work in each district, but it does not authorize such overseers to issue receipts for labor.

It is difficult to predict what construction the courts will put upon the overlapping provisions of the two laws. The latest enactment constitutes the township the unit with authority to subdivide it, and requires the township board to issue receipts for work done in the township. A fair construction would give credit and a receipt for work done under legal direction in any part of the township.

The case is not worth the expense of a lawsuit, and officers in charge should look at the equities and govern their actions accordingly.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year, and one new subscription for one year, and one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, The Kansas Farmer Company, Topeka, Kans.

As THE KANSAS FARMER goes to press this week, a generous rain is falling upon the thirsty soil. To this time the season's deficiency of precipitation is about three inches. In Eastern Kansas the first crop of alfalfa is well grown; small grains are well advanced, and the opportunity has been used to press work with the corn well to the front. Fruit prospects are excellent. Live stock is in fine condition.

Miscellany

Morningglories vs. Corn.

"Morningglories!" What an appropriate name from the artist's viewpoint, but had the naming been left for a corn-grower, we should doubtless know this persistent pest by some less artistic but more emphatic title.

"Probably no other weed has so much to do with increasing the expense of growing corn as this hardy vine, every joint of which detached from the parent vine produces a separate healthy, and vigorous climber, ready to wind itself around and choke the life out of whatever stands within its reach.

"A facetious farmer told us recently that 'glories' pulled up and hung on the fence until thoroughly dried, then burned and the ashes thrown on the ground would produce a vigorous crop next year. Of course this is overdrawn, but it illustrates the almost life-everlasting qualities of this pest.

"To the corn-growers of Illinois, Iowa, Missouri, Kansas, Nebraska, in fact, in all the corn-belt, where the land is becoming more and more valuable each year and must be made to produce profitable crops to pay an interest on the investment, the solution of this problem, 'Morningglories vs. Corn,' is of vital interest."

The above is from an interesting pamphlet just received from the Emerson Mfg. Co., Rockford, Ill., which suggests an easy way to free your corn-fields of this pest.

The company will send to every reader of THE KANSAS FARMER who will send the names and addresses of three or more of his neighbors who are bothered with morningglories, not only the pamphlet above mentioned, but a free copy of the most excellent book, "How to Grow Corn." It is well worth your while to take advantage of this offer, for if THE KANSAS FARMER can be instrumental in assisting the corn-growers to conquer this troublesome pest, it will feel that it has performed a service that will be heartily appreciated by every corn-grower in this State.



**THE FARMERS
HANDY WAGON**

This wagon is just what its name implies—a wagon for the farmer and "handy" because it can be used for all farm purposes, it beats anything on wheels for convenience and utility. Bad roads are no obstacle and there's no reasonable load that it won't carry. When buying a handy wagon be sure of one point, viz., that it's **MADE IN SAGINAW**. Then you will get the best in material, workmanship, durability, strength, everything in fact for there is no low wheel, wide tire, short turn, light draft farm wagon made that equals ours. Our prices are reasonable. Send for catalog.

FARMERS HANDY WAGON CO., SAGINAW, MICH.
Makers Handy Hay and Stock Racks and Handy All-Steel Frame Silos.
Branches, Kansas City & Des Moines.

ciated by every corn-grower in this State.

The Farmers' Independent Grain-Dealers of Kansas, Nebraska, and Oklahoma.

EDITOR KANSAS FARMER:—The Farmers' Independent Grain-Dealers' Association of Nebraska, Kansas, and Oklahoma, the greatest cooperative effort ever undertaken in the Central West, will hold three meetings as follows: At Enid, Okla., May 31, 1906; at Hutchinson, Kans., June 7, 1906; at Lincoln, Neb., June 14, 1906. Able speakers will be in attendance, and the following program is presented. It will be divided up and carried out as nearly as possible, and completed at the three meetings:

"Economic Production and Distribution of Farm Products," C. W. Peckham, Haven, Kans.

"To What Extent May the Farmer Be Benefited by Cooperation?" E. M. Black, Preston, Kans.

"The Farmers' Elevator Manager, His Duties and Responsibilities," F. L. Farnsworth, Cullison, Kans.

"What Shall We Do to Be Saved?" (from the Grain Shark), J. H. Johnk, Solomon, Kans.

"The Farmers' Elevator, as an Economic Quality," W. W. Bowman, Pawnee Rock, Kans.

The following gentlemen will present papers on subjects of their own choosing: Chas. Radenberg, Claffin, Kans.; M. Parkhurst, Kinsley, Kans.; L. E. Ross, Carmen, Okla.; E. E. Van Slyke, Red Rock, Okla.; W. H. Smith, Alva, Okla.; E. E. Benfield, Prosser, Neb.; Geo. E. Miller, Prosser, Neb.

Every farmers' elevator company west of the Missouri River is urged to send delegations to these meetings, to the end that pending arrangements affecting the marketing of this year's crop will be perfected. Farmers, we need your help. You need ours. Negotiations for special railroad rates are pending, and the most favorable rates are expected. Ask for a certificate when you purchase your ticket. Come!

C. W. PECKHAM, Pres., Haven, Kans.
E. M. BLACK, Sec., Preston, Kans.

Well Drills and Drillers' Supplies

The best on the market. Manufactured by THATCHER & SONS, Stillwater, Oklahoma. Write for circulars and prices.



LAWN FENCE

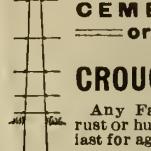
Made of Steel. Lasts a lifetime. We have no Agents. Sold to users at Wholesale Prices. 7 cts. a foot up. Cheaper than wood. Catalogue Free. MITCHELL BROTHERS, Box 399, Muncie, Indiana.



\$10.00 Sweep Feed | \$14.00 Galvanized Grinder.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.



CEMENT FENCE POST or Building Blocks WITH THE CROUCH \$10 MACHINE

Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free. Ellsworth Crouch, Oakland, Kansas.

Collections made in all parts of the United States. No fee charged unless Collection is made.

BOTH PHONES NO. 1577

The Kansas Collection Agency

415 Kansas Avenue.

TOPEKA. KANSAS

Special attention given to stock-breeders account. Reference furnished on application.



THE CENTURY GRADER

Best Light Grading Machine made. Grades Roads, Cemeteries, Lawns, Parks, Race Tracks; Levels Land for Irrigation, Cuts Ditches, Cleanse Feed Lots, Barn Yards, Etc. Easily operated by one man. Light, practical and low priced. For general use about the farm or for grading town streets or country roads this grader is unequalled. Descriptive Catalogue FREE.

THE WHITE CITY GRADER CO., Box F-7, WHITE CITY, KAN.

The Best Fruit Paper

is The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Every one who has a few fruit trees or a garden, should read



THE FRUIT-GROWER

ST. JOSEPH, MISSOURI

Every issue is handsomely illustrated and from 32 to 64 pages a month are filled with interesting matter pertaining to fruit-growing and gardening. The first four issues of 1906 will be handsome special numbers devoted to the following subjects.—January, The Horticultural Societies; February, Spraying; March, Gardening; April, Small Fruits. Any one of these numbers will be worth a dollar to you. We publish the "Brother Jonathan Series" of fruit books. Send your name and address to Bro. JONATHAN and learn how to secure these books free.

Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

Two Years Guarantee



Send direct to our factory for catalog, make your selection (many styles) and we will ship it, freight prepaid, for you to try 30 days. If it doesn't stand the test, if quality isn't high and price low (about half local dealers'), if you are not satisfied, ship it back at our expense.



AND A BARGAIN

Send direct to our factory for catalog, make your selection (many styles) and we will ship it, freight prepaid, for you to try 30 days. If it doesn't stand the test, if quality isn't high and price low (about half local dealers'), if you are not satisfied, ship it back at our expense.

You Deal With the Factory

when you buy our vehicles. Not a mail order house or agent. And you can buy just as safely from us as from any local dealer. Be sure you send for catalog. We make it all plain there. **We pay the freight.** Address Dept. D. The Apex Mfg. Co., Bloomington, Ill.

Agriculture

To Rid Alfalfa of Weeds.

This spring I sowed alfalfa on corn-stalk ground and secured a good stand, but the weeds are coming up thick also. How shall I handle this pile of alfalfa to best get rid of the weeds? Shall I cut it early or late?

W. F. SCHUERMAN,
Dickinson County.

Do not be in any hurry to cut the weeds on the newly seeded alfalfa-field. It is better to let the alfalfa get well set and make considerable top growth before the mower is run over the ground. It is well, also, to mow the weeds on new alfalfa during a period of wet weather. Raise the sickle three or four inches high so as to cut off the young plants. Unless the weed-growth is very rank and heavy, it is not necessary to remove the weeds from the ground.

Although too early or too frequent cutting the weeds on alfalfa ground may not be desirable, neither is it desirable to leave the weeds until they have made a rank, thick growth which will tend to smother the alfalfa and leave the tender plants exposed to the hot sun when the weeds are cut. In cutting the weeds on newly seeded alfalfa, the purpose should be to clip the weeds often enough and at sufficient height so as to keep the alfalfa from being shaded and smothered by a rank growth of weeds. It is not advisable to cut the first crop of weeds close to the ground, especially when the weeds have made a rank growth and are approaching maturity. The tendency will be, of course, to destroy that crop of weeds, but the cutting of the alfalfa plants close to the ground weakens them also, and another crop of weeds will start, including such weeds as crab-grass and fox-tail, and often this second growth of weeds will injure the alfalfa more than the first, and it is practically impossible to destroy crab-grass or fox-tail by mowing. The purpose should be, therefore, where crab-grass or fox-tail is prevalent, to prevent the crab-grass or fox-tail from starting by leaving the undergrowth of weeds and alfalfa, which is accomplished by raising the sickle bar several inches above the ground, as stated above. I have known of excellent stands of alfalfa being entirely destroyed by a single close cutting during hot, dry weather, while upon a part of the same field which was not mowed, but on which the weeds were allowed to grow and were not cut during the season, the alfalfa made a good stand.

I would answer your question in this way: That you should cut the weeds on this field as soon as they appear to be shading or smothering the alfalfa, and that at two or three intervals during the balance of the season the mower he used, as it may appear necessary. Probably this alfalfa will make so rank and rapid a growth that by the time it is necessary to clip the weeds the third time, the plants will have developed sufficiently so that the alfalfa may be cut for hay, and this may be done without injuring the alfalfa, provided the young plants have reached the stage of maturity when alfalfa should be cut for hay, namely, after the plants have begun to bloom. When alfalfa has made such a growth it may be cut close to the ground without injury to the plants. It is preferable, however, to cut this first crop of hay during a favorable period of weather, when the soil is rather moist. Hot, dry weather immediately after cutting may sometimes enfeeble or destroy some of the alfalfa plants.

Last season at this station we cut two crops of hay from early spring-seeded alfalfa, and the weeds were clipped twice previous to the cutting of the first hay-crop. Both crops of hay were rather weedy and the yield was light. This alfalfa passed through the winter in good condition and the first crop is now (May 15) nearly ready to cut for hay.

A. M. TENNEYCK.

Information Regarding Field-peas.

Will you kindly give me information regarding field-peas. I wish to sow five acres. Where can I get the seed, and how much will be required to plant an acre? C. W. HOOKER,
Kingman County.

It is now getting rather late (May 15) to sow field-peas. The crop should have been seeded the last of April or first of May. Field-peas are really a crop which is better adapted for grow-

ing in the Northern States than in Kansas and in the States further south, and if sown in this State it is well to plant rather early in the spring. At this station we usually plant field-peas soon after the seeding of early spring grains. Prepare a seed-bed the same as you would prepare for sowing any small grain. The peas may be sown broadcast or with the grain-drill. Some drills break the peas badly, while others plant them in good condition. Set the drill to sow about two bushels of oats per acre; it will require about a bushel and a half of seed-peas to plant an acre when seeded in this way. In a well-prepared seed-bed cover the peas to a depth of three inches. The crop should be given little or no cultivation; it is possible to harrow the field before the peas come up, but later harrowings destroy the plants.

Field-peas are rather difficult to harvest for forage, since the vines often lodge and are difficult to cut with the mower. It is usually advisable to seed the peas with oats or some grain-crop, the grain tending to hold the pea-vines off of the ground, so that the crop may be readily cut with the mower. The combination of peas and oats makes a very good fodder. It will be necessary, however, to seed the crop early in the spring in order that the grain may grow successfully with the peas. When sown in combination, it is usual to sow 3 or 4 pecks of peas with about a bushel of oats per acre. If you want to sow the peas for seed-production, thinner planting may be advisable.

Varieties of field-peas commonly grown are the Yellow Canada and the White Canada. The Green field-peas are also a good producing variety at this station. You can secure seed from almost any seed-dealer.

For your part of the State cow-peas are better adapted for growing than field-peas, and it is yet early for seeding cow-peas. For information regarding the planting and culture of cow-peas, I enclose copy of a circular letter answering questions on this subject.

A. M. TENNEYCK.

Bacteria for Alfalfa-Field.

I would like to secure information concerning bacteria to inoculate the soil in alfalfa-fields, where to obtain and how to use it. I have a field of alfalfa which does not seem to be doing well, there being no tubercles on the roots. I would like to get culture to inoculate twenty acres.

C. B. GUFFY.
Pottawatomie County.

Probably the only way in which you can successfully introduce the bacteria into the soil of the field in question will be by distributing infected soil taken from some old alfalfa-field. It would have been well to have spread this infected soil early in the spring and mixed it with the soil of the field by disk-ing and harrowing. This may be done now, immediately after taking off the first crop of alfalfa.

If you can secure soil from some old alfalfa-field not far from your neighborhood, I would recommend to use a considerable quantity of the infected soil, say six or eight hundred pounds per acre. The usual method of distributing the infected soil is to sow by hand. Usually on new seeding, two to three hundred pounds of the infected soil per acre is sufficient to use.

The nitro-culture preparations may only be used successfully in inoculating the seed before planting. I have mailed you copies of letters giving further information regarding the inoculating of soil with alfalfa bacteria, both by the use of nitro-culture preparations and with infected soil.

A. M. TENNEYCK.

Seedling Alfalfa.

Last spring I sowed four acres of Brome grass and alfalfa according to your instructions for pasture. The Brome seed was not good, and is a thin stand, but the alfalfa is fine. Will the Brome grass thicken and increase?

We want to sow six acres of alfalfa for hay this spring. The ground was plowed last fall, and dragged to keep down weeds and conserve moisture. It has been harrowed twice this spring. Will disk-ing once and harrowing put it into good condition for seeding?

Please give me all the information you can on alfalfa, Brome grass, and English blue-grass, and send bulletins.

W. A. OSLER.

Smith County.
It may not be necessary to disk the ground which you describe in preparing a seed-bed for alfalfa. If the weeds have started, it may be necessary to disk and harrow as you have

suggested, but I would not advise to loosen the ground very deep, not over two inches, if it is possible to disk so shallow. A better implement than the disk harrow to prepare this ground is the Acme harrow. The Acme harrow is an excellent weed-killer and a good cultivator, but it does not necessarily loosen the soil so deep as it would usually be loosened with the disk harrow. The seed-bed for alfalfa, as you understand, should not be too deep and mellow, but rather only mellow about as deep as the seed is planted or a little deeper and below the seed the ground should be rather firm, making good connection with the subsoil so that the seed and young plants may secure an abundant supply of moisture, which has been stored in the deeper soil. With such a condition of seed-bed the seed may sprout and the alfalfa start with little or no rain.

I would have preferred to sow the alfalfa earlier in the spring. Later seeding is more apt to be injured by heavy rains which pack and firm the soil at the surface, or by hot weather, which may destroy the young plants before they are strong and well rooted. However, the field in question, which was fall plowed and has been harrowed several times during the spring, ought to be in good physical condition for starting alfalfa, provided the weather conditions are not too unfavorable after the seeding.

I have requested Professor J. T. Willard, director of the station, to mail you bulletins giving information regarding alfalfa and the grasses which you have named.

Referring to your last spring's seeding, Brome grass will gradually thicken up and occupy all space not filled with alfalfa, and the grass will doubtless finally crowd out the alfalfa, although this will not occur for several years.

A. M. TENNEYCK.

How to Kill Johnson Grass.

I should like to learn how to kill Johnson grass. We have a rich garden spot which has become infected with it. It is impossible to cultivate it out, for it is so deep rooted. I had thought of mulching it heavily with wheat straw. The seed was sown on an adjacent plot a number of years ago, having been recommended as an excellent grass for hay and pasture, but it has proven good for nothing. I saw it advertised in some agricultural paper not long ago. I hope no reader of the Kansas Farmer will experiment with it, for it is a nuisance.

Allen County. CHAS. M. FUNK.

It is almost impossible to entirely eradicate Johnson grass where it has once obtained a foot-hold, provided the soil and climate are favorable for its growth. At this station we have little difficulty in destroying the grass, because it is not perfectly hardy and will often winter-kill. Possibly in your section of the State the grass may be destroyed by winter-killing, provided it is not protected with a cover of trash or manure. Although under field conditions it may be very difficult or practically impossible to eradicate the grass, as is the general statement of those who have had experience, yet it seems to me you should be able to destroy the grass in a garden spot. I know of no weed that can not be destroyed if the plants are not allowed to grow above the ground, but are kept continually cut with the hoe. It might take two or three seasons of careful hoeing to entirely destroy the grass, but it surely may be destroyed in this way. Perhaps your garden is something like other gardens which I have observed, well cultivated during the early part of the season but neglected during the latter part of the season, when the grass makes a renewed growth and gets a good start so as to store up nourishment in the roots to continue the growth and propagation another season.

A. M. TENNEYCK.

Varieties of Alfalfa Profitable for Forage-Production.

How many varieties of alfalfa are there that are profitable for forage-production? How may they be distinguished? If there is any difference, which is the best? Will alfalfa seed grown on irrigated land germinate as well as seed grown on unirrigated land? On April 4, 1905, I sowed Bromus Inermis on spring plowing, sowing about 12 pounds of Brome grass and 4 or 6 pounds of alfalfa-seed per acre, but failed to get a good stand.

On the same day I sowed alfalfa on fall plowing, 16 pounds per acre, and secured an excellent stand. I write this simply to give you my experience, thinking perhaps you would like to

SAVE YOUR BACK

Save time, horses, work

and money by using an

Electric Handy Wagon

Low wheels, broad tires. No

living man can build a better.

Book on "WheelSense" free.

Electric Wheel Co. Box 46, Quincy, Ill.

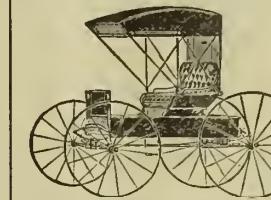


SCALES

ALL STYLES
LOWEST PRICES

30 DAYS
FREE TRIAL
AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

Send for 84-Page Catalog



Buggies
\$28.00

Harness
\$5.60

Erhardt Carriage and Harness Co., Atchison, Kansas

A Stronger Fence At Lower Prices

ADVANCE
Continuous Stay

Advance Fence is sold direct to users so you can save the retail man's profit. It's a stronger fence, too, for the stay wire is continuous, not cut at the top or bottom or anywhere else, but twisted into the margin cables from one stay to the next. Advance fence is practically one piece. Try it 30 days and if you don't like it we'll refund your money. Satisfy yourself of its value before buying. Our Free Fence Book tells all about it.

ADVANCE FENCE CO., 3781 Old St., PEORIA, ILL.

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor,

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)
Chicago, Ill.



\$35.00 Split Hickory

Top Buggy, guaranteed 2 years. Sold on 30 Days Free Trial. The biggest buggy bargain of the year.

100 other styles, vehicles and harnesses 1906 catalogues free.

The Ohio Carriage Mfg. Co., H. C. Phelps, Pres., Station 251, Cincinnati, Ohio.

DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on stilts. With engine or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

don't have to help it, it helps itself if I put the hay in the hopper. J. H. Akers, Sibley, Mo.



Satisfaction guaranteed. Manufactured by the AUTO FEDAN WAY PRESS CO., 1084 Jefferson St., Topeka, Kansas

The Waterloo Gasoline Engine
A popular engine at the right price.

Also Power and Sweep Feed Grinders

Write for illustrated catalog.



WATERLOO GASOLINE ENGINE CO.
1014 Cedar St., Waterloo, Iowa.

have farmers' experience in different parts of the State. E. S. RALSTON,
Cloud County.

Two varieties of alfalfa are generally recognized in this country, namely common alfalfa and Turkestan alfalfa. The Turkestan alfalfa is really only a strain of common alfalfa, which has been grown in the dry plains of Turkestan until it has become adapted for growing under these climatic and soil conditions, and this strain of alfalfa when sown in our Western Plains region seems to be a little hardier and better adapted for growing under the dry climatic conditions of the West than common alfalfa. Also the Turkestan alfalfa is harder to resist cold than the common alfalfa, and may be successfully grown further north, being hardy and productive in North and South Dakota, where common alfalfa usually winter-kills.

At this station the Turkestan alfalfa has not produced quite so large crops of hay as the common alfalfa. At the Hays Experiment Station, in Ellis County, Turkestan alfalfa sown a year ago on the upland has made an excellent stand and promises a large crop of hay this season. The common alfalfa has been grown at the Hays Station for several years and does well on the bottom-land. The common alfalfa is being grown successfully not only in Ellis County, but in Trego, Gove, Logan, and Wallace Counties, as I learned by a trip through these counties two weeks ago. Some even have succeeded in growing alfalfa successfully on the upland in the above named counties, but usually the crop is being grown on bottom-land.

In my judgment there is little difference between Turkestan alfalfa and common alfalfa, other than that the seed of the true Turkestan alfalfa came originally from Turkestan. The plants of the two varieties look almost exactly alike. I believe that the common alfalfa grown and seeded in the West for a few years may be as hardy and as well adapted to Western conditions as the imported Turkestan alfalfa.

From actual experience I can not answer your question regarding the relative vitality of alfalfa-seed grown by irrigation as compared with seed grown in dry climate without irrigation. We have been intending to make a trial on this point at the Experiment Station, but have not yet undertaken this experiment. From examination of different samples of seed and also from general tests of the germination of seed without any special reference to whether it was grown under irrigation or not, I conclude that a good quality of alfalfa-seed grown by irrigation is just as vital and just as capable of germinating as seed of a like quality grown without irrigation. As a matter of fact, however, the seed grown without irrigation is often inferior in quality compared with the seed grown by irrigation. Usually there is a larger percentage of shrunken seeds in the alfalfa which has been grown on dry land. For seeding in this part of the State, I prefer to use seed of good quality and of high germinating power, without much reference to whether it was grown by irrigation or otherwise; but if I were to sow alfalfa in Western Kansas on dry land where it could not be irrigated, I would prefer to sow seed which had been grown under similar conditions, not because such seed would germinate better than other seed, but rather because having been grown and produced under similar conditions, such seed will produce plants which are likely to be more hardy and better adapted for growing under the same conditions again.

A. M. TENNEYCK.

To Destroy Thistles.

Not quite a year ago I wrote you for information regarding ridding pastures of thistles. You kindly responded with much valuable information. I carried out your suggestions so far as I had time and feel that I have taken first steps toward ridding the pasture of this pest. I write to ask your opinion concerning the following method of combating them: Hoe them up, hoeing deeply, as soon as the plants are large enough to distinguish, then wait until fall, say September, when a second growth will have appeared, and again hoe them up thoroughly. This is claimed to be a sure method of destroying them for good. I am interested to know whether the college has ever known of this treatment being used, and if so whether it was successful or not.

C. D. SMITH.

Marshall County.

Doubtless two thorough hoeings a year, as you suggest, will largely de-

stroy the thistles in the course of two or three years. It may be necessary, however, to go over the ground with the hoe during the summer in order to destroy such thistles as may escape the spring hoeing. The main object is not to allow any more thistles to seed. When you destroy a plant by cutting its root deep in the ground that plant is gone, and the thistles will only be renewed by the sprouting of seed which is already held in the soil. I know that hoeing thistles has been entirely successful in destroying them on small fields.

A. M. TENNEYCK.

Infected Corn.

EDITOR KANSAS FARMER:—I have this morning received from W. J. Janney, of Burlington, Kans., a sample grain of germinated corn from the field, and with it a specimen of a small ground-beetle known as Clivina, apparently the species impressifrons. The beetle has no common name, but belongs to an extensive family that is well known to contain chiefly carnivorous species. Any departure from the carnivorous habit in a member of this family (Carabidae) is well worth noting, but it is especially important that we shall become acquainted with any species thereof, that display any tendency to destroy sprouting corn, as several kinds of these beetles are among the most abundant insects in plowed fields the State over.

Mr. Janney evidently believes this Clivina to be responsible for the destruction of the sprouting corn in his 80-acre field, as he sends the beetle with his letter of inquiry, but it is difficult for me to believe that he has found the right insect.

The object of this note is to request that farmers who observe any injury to germinating seed-corn will send abundant specimens of the insects found in connection, mailing them in a baking-powder can or other tin box addressed to the Entomologist, Experiment Station, Manhattan, Kans., and thus give us material aid in the solution of a very important question.

E. A. POPENOE.

Alfalfa on Limestone Soil.

Please send me your Bulletin No. 114, on growing alfalfa in Kansas. How is Butler County for alfalfa-production? How is soil underlaid with lime rock for alfalfa?

F. E. BAILEY.

Buffalo County, Nebraska.

The supply of Bulletin No. 114 is exhausted, but you will receive a copy of Bulletin No. 134, on "Seeding Alfalfa and Saving Alfalfa for Seed." This bulletin has not yet been published, but will be mailed in a few days.

Alfalfa is well adapted for growing in Butler County. Col. J. W. Robison, Towanda, Butler County, Kansas, has thousands of acres in alfalfa.

Soil underlaid with limestone rock, provided the rock is not too near the surface, should make excellent alfalfa land. Alfalfa is a heavy feeder on the mineral elements of plant-food, and requires an abundant supply of lime in the soil. Ideal conditions in this respect are secured in a soil which has been formed by the disintegration of limestone.

A. M. TENNEYCK.

Alfalfa on Alkali Land.

I had thought of sowing alfalfa on some alkali land. Would you advise that this be done?

GEO. M. HULL.

Saline County.

I have had no experience in sowing alfalfa on alkali land. If the alfalfa could be started on such land, I believe that it is as likely to stand as any other crop which you can grow. The difficulty will be to start it, as the young plants will probably be destroyed by the alkali early in their growth. Probably if such land could be plowed deep about a year to six months previous to seeding, then receive a dressing of manure, which should be well disked into the surface soil, it could be put into such condition that the alkali would not bother much for a season, during which the alfalfa might be started and well established. As to whether the alfalfa would continue to live and grow in such soil when once started will depend upon the amount of alkali in the soil, and also upon the tendency of the land to accumulate alkali. If such land is not well drained, and the drainage of the surrounding country tends to carry on to the land more of the soluble alkali salts, then the alkali may continue to accumulate and increase in amount, above that which is removed by the crop, in which case it will be only a matter of time until all vegetation on such land will be destroyed.

If this is the white alkali, it is much less likely to destroy the alfalfa-plants than the black alkali. I would advise

SAVE HALF THE TIME

Half the Work

The farmer who is looking for machines that will do his work in less time—
that will increase his working force one-half by enabling him to do the same work in half the time, can not afford to overlook the time-saving features and up-to-date improvements embodied in the

Do Better Work

"St. Joe" Double Row Disc Cultivator

This improved cultivator is equipped with our new patent **Seat Board**, which runs on Rollers and will adjust itself much easier than any other seat board—a vital point in its favor. **Four Levers** make this machine handy to operate—always under complete and perfect control. **Four Coil Springs** are used—two to assist operator in raising Discs, two to cushion the Shovels when striking obstructions. **Adjustment** is simple and easy—to suit the work—we describe how this is accomplished in our free circular which the farmer can have simply by asking for it. Tells of more good cultivator features than any other machine on the market has. Write for the circular to-day and see how this machine saves you time and money.

ST. JOSEPH PLOW CO.,
Box 12 St. Joseph, Mo.

THE JAYHAWK STACKERS AND RAKES



Have been proven the best by test.
No loose spots to settle, take water and spoil.
It saves 50 per cent of the labor on the stack.
It can place hay in any spot on a rick of any length.
It builds a rick 20 feet high.
It is valuable in retopping.

No troublesome pulleys.
No stakes to drive.
No trouble with winds.
No time lost moving.
No upsetting.
No bother with long ropes.

It is a good wagon-loader. It has only 18 foot of rope. Team only travels twice as far as the load is raised. The load can be carried and dumped at any point of elevation. It is a great labor saver.

We also manufacture two patterns of

Sweep Rakes

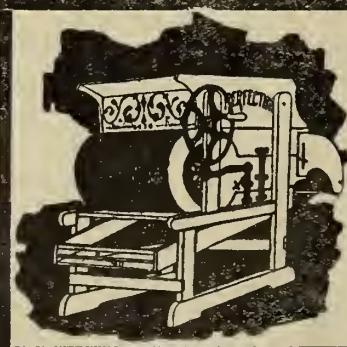
We Ship Responsible Parties on Trial

Give us a chance to do so by letting us know your wants.

YOURS FOR A SQUARE DEAL

The F. Wyatt Mfg. Co., Salina, Kas.

Mention Kansas Farmer.



Richland, Kans., April 17, 1906

The Lewis-Tuttle Mfg. Company

Dear Sirs:

Beg to thank you for prompt shipment of machine and am much pleased with same. My neighbors say it is the best machine they ever saw.

Yours respectfully,
F. A. DEZINS

Now is the time to find out

What "Perfection" Will Do.....

We will tell you just how to raise a 100 per cent crop if you ask us. Be sure to tell us what kind of grain you raise. Write to-day. All it costs you is the trouble of asking.

Lewis-Tuttle Manufacturing Co.

305 C Kansas Avenue.

Topeka, Kansas

LAKE BREEZES MANITOU

Can be enjoyed in safe delight
on the STEEL STEAMSHIP

FOR COMFORT, REST AND PLEASURE
It offers an unequalled opportunity
First Class Only-Passenger Service Exclusively

Modern comforts, electric lighting; an elegant boat equipped for people who travel right. Three sailings weekly between Chicago, Frankfort, Charlevoix, Petoskey, Harbor Springs and Mackinac Island connecting for Detroit, Buffalo, Duluth and all Eastern and Canadian Points. Ask about our Week-end Trips for Business Men. For Terms, Booklets and Reservations, address,

JOS. BEROLZHEIM, G. P. A. Manitou Steamship Co., Chicago

LIGHTNING HAY PRESSE
meet all demands in Hay Baling. Used over 20 years

SIMPLE, STRONG, DURABLE, RAP
The Best is most Profitable.

Send for catalogue showing all styles. Horse Power and Belt Power

LIGHTNING HAY PRESSE
meet all demands in Hay Baling. Used over 20 years

SIMPLE, STRONG, DURABLE, RAP
The Best is most Profitable.

Send for catalogue showing all styles. Horse Power and Belt Power

Kansas City Hay Press Co., 129 Mill Street, Kansas City, Mo.

that you try seeding alfalfa on this land in a small way, and I should be pleased to know the results of the experiment.

A. M. TENEYCK.

Frosted Alfalfa.

Will alfalfa bloom as usual after being frosted? We had a hard frost here. Should alfalfa be cut at once or wait until the usual time? F. M. BROWN.

Butler County.

If the alfalfa has simply been checked by the frost and the plants have not been killed to the ground, I would not cut it until it has reached the stage of maturity to make the best hay, namely, about the beginning of the blooming period. There is no reason why the alfalfa will not bloom, although, if the plants have received a severe check, the blooming is likely to be a little late, and perhaps the number of blossoms will be less than would have been the case without injury by frost. However, your judgment as to whether or not it is best to cut the alfalfa now should be of more value than my suggestions. If the plants do not seem to recover from the effect of the frost in a few days, possibly it would be best to cut the alfalfa and allow it to start a new growth, even though the present crop may not be of much value for hay.

A. M. TENEYCK.

Rust on Wheat.

Can you explain why some fields of wheat are badly affected with rust while adjacent fields are but little affected? Are some varieties of wheat more susceptible to rust than others? If so, what kind would you advise sowing in order to avoid this disease? I have two varieties, sowed at the same time, and one field is badly affected, while the other is not.

Neosho County. SILAS HUMMER.

Some varieties of wheat seem to be more rust-resistant than others. This is particularly true of the durum wheats. Probably the hard red Turkey or Russian wheats are somewhat more rust-resistant than the varieties of soft wheat grown in this State. You did not state in your letter what different kinds or varieties of wheat you had sown.

Other conditions may also affect the development of rust. For instance, if the wheat on one field started a little earlier than the other, due to more moisture in the soil or better conditions for growth, the grain may have become infested with rust last fall and the fungus, living through the winter, developed early in the spring and rapidly spread, infecting the whole field. Doubtless, the adjacent field will be as badly infected a little later.

So far no remedies for the prevention of rust have been discovered. Certain soil and climatic conditions evidently favor the development of rust, but there is no way to absolutely destroy the fungus or to prevent its attack. It is now known that the fungus passes the winter in the straw and stubble, and the burning of the stubble has been recommended for destroying the rust spores. But the fact that rust develops so rapidly and is so easily spread with the winds makes it practically impossible to prevent its ravages to any appreciable extent by a local destruction of the spores, by burning the straw or stubble on certain infected fields. Probably the only remedy will be to breed rust-resistant varieties.

Early-maturing grain is usually less attacked by rust than later-maturing grain or later-maturing varieties. This is especially true of oats and barley. It is advisable, therefore, to grow varieties of oats and barley which mature early. I can name no particular variety of wheat, oats, or barley which may be considered "rust-proof." This name is sometimes attached to different varieties of grain, and it may be true that certain varieties of oats and other grains are less susceptible to the attacks of rust than others, as stated above. However, the difference in the date of maturity of the grain is probably one of the main factors which determines whether or not it rusts badly, the earlier-maturing sorts escaping the attacks of rust in a large degree.

A. M. TENEYCK.

Curing Alfalfa.

It should always be borne in mind that curing hay is one thing and drying it quite another. By the ordinary methods, hay is dried to a crisp in the swath and windrow, and then hauled in. This is a very expensive method to follow with alfalfa. It results in a loss of a large proportion of the leaves, and still the hay is not cured. All of the legumes, especially, need to be cured away from the sunlight and heat. To do this effectively, we rake into windrows as soon as it is wilted

enough to handle well on the rake. It is still quite green and the stalks are full of juice. It is then cocked up in about 100-pound cocks and covered with the cotton cloth hay-cap with weights at each corner. The alfalfa goes through the first sweat in the cock, is away from the rays of the sun, and really cures, keeping its bright green color and retaining all its protein. It remains thus from three to five days. If rainy weather sets in, it stays in the cock until a clear day, when it is opened to the sun for an hour or so and then hauled into the barn or to the stack. Handled in this way, we believe Eastern-grown alfalfa contains greater feeding value than that harvested in the irrigation districts. We are certain we have seen none anywhere that is of finer color and quality than the cap-cured alfalfa of Wisconsin.—Hoard's Dairymen.

Gasoline Engine in Irrigation Work.

Below is given a table from a paper of the United States Geological Survey entitled "Observations on the ground waters of Rio Grande Valley." This table shows the results of tests of a number of plants used for irrigation in the valley of the Rio Grande in Eastern New Mexico and trans-Pecos, Texas.

Under the head location is given the post-office nearest the ranch on which the pump is located. The fuel used by these pumping plants is gasoline which term as here used includes the "distillate" manufactured from Texas Crude Oil, which is extensively used for fuel purposes. Its calorific value is somewhat less than the gasoline used in Eastern States. The price of gasoline is given in cents per gallon in barrel lots.

In all of the plants except the one of E. J. Hadlock, water is raised by means of centrifugal pumps which are usually coupled to the top of the well casings.

This table shows in a striking manner the adaptability and cheapness of the gasoline engine for this purpose.

Location.	Fuel.	Make of Eng.	H. P.	Cost of fuel per 100 ft. gallons.	Gals. per Total lift feet.	Cost of fuel per hour.	Price of fuel.
Las Cruces, N. M.	Gasoline.	Olds.	12	\$0.000102	6558	\$0.163	\$0.14
El Paso, Texas.	Gasoline.	Charter.	18	2269	3070	0.112	0.000227
El Paso, Texas.	Gasoline.	Otto.	22	2268	2780	0.074	0.000172
El Paso, Texas.	Gasoline.	F. M. Co.	22	2200	0.14	0.350	0.001016
El Paso, Texas.	Gasoline.	F. M. Co.	22	1500	0.14	0.210	0.000149
Las Cruces, N. M.	Gasoline.	Columbus.	15	658	3557	0.090	0.000250
Mesilla, N. M.	Gasoline.	Otto.	12	181	4553	0.090	0.000192
Mesilla, N. M.	Gasoline.	Otto.	18	725	4645	0.177	0.000192
Mesilla Park, N. M.	Gasoline.	F. M. Co.	21	1800	0.17	0.340	0.000192
Mesilla Park, N. M.	Gasoline.	Webber.	8	1900	6448	0.177	0.000192
Mesilla Park, N. M.	Gasoline.	Webber.	12	1200	0.17	0.315	0.000192
Mesilla, N. M.	Gasoline.	Chicago.	8	800	0.17	0.255	0.000192
Mesilla, N. M.	Gasoline.	Ohio.	28	2000	0.17	0.370	0.000303
Berino, N. M.	Gasoline.	Webber.	12	992	0.17	0.160	0.000133
Berino, N. M.	Gasoline.	Webber.	12	992	0.17	0.204	0.000500
Berino, N. M.	Gasoline.	Webber.	12	992	0.17	0.160	0.000112
El Paso, Texas.	Electricity Gen. Elect.	10	1200	0.05	3758	0.243	0.191
El Paso, Texas.	Crude Oil.	F. M. Co.	28	3000	0.03	0.3670	0.0377
Las Cruces, N. M.	Wood.	Wood.	20	1600	2.00	0.223	0.000312
Mesilla Park, N. M.	Wood.	Wood.	20	1600	2.00	0.223	0.000294

\$19 to Boston and Return, \$49

Plus \$1 from Chicago, via Nickel Plate Road, May 31 to June 9, inclusive; also via New York City at excursion rates. Return limit of July 15 by extension of ticket. Folders, rates and all information furnished by applying to John Y. Cahalan, General Agent, Room 298, 113 Adams St., Chicago. (4)

Tools That "Count"

You can dig more ditch, hoe more corn, with a Keen Kutter shovel or hoe than with any other shovel or hoe made. No tools are so well adapted to their various uses as Keen Kutter tools.

Every stroke made with a Keen Kutter tool counts—there's no time lost from breakage or false motion. To accomplish the most—in the quickest way—at the least cost, use

KEEN KUTTER TOOLS

See this Keen Kutter Shovel—blade, socket and strap are rolled from a bar of best crucible steel, and oil tempered to give wear, resisting power and elasticity. This shovel has a perfect "hang" for easy handling and great working capacity.



Keen Kutter Hoes, Forks, Shovels, Garden-trowels, Grass-shears, Rakes, Manure-hooks, Axes, and a complete line of Carpenter Tools are all of the same high-grade steel, oil tempered and beautifully finished, handles of first growth, selected Hickory. Every Keen Kutter tool is of the highest Quality—the best in the world. If not at your dealer's write us.

TOOL BOOK FREE.

SIMMONS HARDWARE COMPANY
St. Louis and New York.
U. S. A.

"The Recollection
of Quality Re-
mains Long After
the Price is For-
gotten."

Trade Mark Registered.

BLACKLEGIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

No dose to measure. No liquid to spill. Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVID & COMPANY.
DETROIT, MICHIGAN, U. S. A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

Save Money on Oil

We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

Our Premium Machine Oil is sold at \$3.50 per barrel. Thousands are using it and find it all right.

Every barrel guaranteed, and you be the judge. Other oil costs 38¢ to 40¢ per gal.; ours costs \$3.50 per barrel. Freight rate is 32¢ per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2¢.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

\$31,500,000.00 at Risks

30,000 Members

The Farmer's Alliance Insurance Company of McPherson, Kansas

We furnish insurance at cost; 18 years of successful business. Why carry your insurance with others when you can get it in this company at much less cost? Write for full particulars of our plan.

C. F. Mingenback, Sec., McPherson, Kansas

Destroy the Gophers

In Your Alfalfa Fields by Using

Saunders' Gopher Exterminator

It is a machine which forces a deadly gas through their runways and is warranted to kill gophers within 100 feet of operation. With it man can clear from five to six acres of gopher-infested land in a day at a cost of twenty cents per acre. The poison we use can be gotten at any drug store. Satisfaction guaranteed or money refunded. Complete outfit for \$5.

Flint Saunders, Lincoln, Kansas

Mention The Kansas Farmer.

Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

May 29-June 1, 1906—Sale of all beef breeds, Kansas City sale pavilion, D. R. Mills, Mgr., Springfield, Ill.

June 7, 1906—F. M. Marshall, Blackwater, Mo.

June 12-14, 1906—Sale of all beef breeds at Sioux Falls, S. D., D. R. Mills, Mgr., Des Moines, Iowa.

June 19-20-21, 1906—Dispersion of Tebo Lawn Shorthorns, E. B. Mitchel, manager, Clinton, Mo., at Kansas City.

June 26-28, 1906—Sale of all beef breeds at Des Moines, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.

October 23-4-5, 1906—Glimco Live Stock Association sale of pure-bred stock, Glenco, Kans.

October 10, 1906—L. L. Faulkner, Jamesport, Mo.

October 17, 1906—W. J. Honeyman, Madison, Kans.

October 17, 1906—Poland-Chinas, W. A. Pruitt, Ashville, Kans.

October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.

October 20, 1906—W. R. Dowling, Norcatur, Kans.

October 23-24, 1906—E. A. Eagle & Sons, Agricola, Kans.

October 24, 1906—Poland-Chinas, Frank A. Dawley Waldo, Kans.

October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.

November 1, 1906—Frank Zimmerman, Centerville, Kans.

November 6, 7, 8, 1906—Sale of all beef breeds, Kansas City Sale Pavilion, R. A. Ford, Lawson, Mo., Manager.

November 8, 1906—T. P. Sheely, Hinne, Mo.

November 13, 1906—Howard Reed, Frankfort, Kans.

November 16, 1906—G. M. Hebbard, Peck, Kans.

November 20-23, 1906—Blue Ribbon sale of all beef breeds, D. R. Mills, Mgr., Des Moines, Iowa.

November 27, 1906—L. C. Caldwell, Moran, Kans.

December 4, 1906—Poland-Chinas, Lemon Ford, Minneapolis, Kans.

December 11-12, 1906—James A. Funkhouser and Charles W. Armour, sale pavilion, Kansas City.

Improved Stock Breeders Association of the Wheat Belt—November 13, 14, 15, 1906, at Arkansas City, Kans., I. E. Knox, Nardlin, O. T., manager; Dec. 5, 6, 7, 1906, at Anthony, Kans., Chas. M. Johnston, Caldwell, Kans., manager; Dec. 18, 19, 1906, at Wichita, Kans., J. C. Larimer, Derby, Kans., manager; Feb. 13, 14, 15, 1907, at Caldwell, Kans., Chas. M. Johnston, Caldwell, Kans., manager.

The Place for Large Yorkshires in American Swine Husbandry.

J. J. FERGUSON.

In this country we now have something like twenty recognized breeds or well-defined types of swine, each supposed to possess certain peculiar or special characteristics fitting them in a superior degree for certain uses or rendering them especially adapted to thrive under special conditions. Multiplicity of breeds and types is due perhaps primarily to the whim or fancy of the breeder, but is also largely dependent upon the wide variation in conditions of soil and climate over the country. In our wide extent of territory with diversified conditions of soil and climate resulting in a wide range of crop-production, we naturally find a wide difference in the character and quality of the hogs produced in different sections. This is true to the extent that we may readily divide the hog-producing territory into well-defined areas, each presenting what is practically a distinct and characteristic type of swine. For example; the lard hog of the corn belt is the result of abundant supplies of feed rich in fat-producing materials. Continued experience has demonstrated that the lard-type hog, while undoubtedly the most profitable type for the corn-belt, may not in all cases give the farmer of the Eastern or Northwestern States the largest net returns. In the Northwestern States where the supply of feeds is of such character that they tend rather to the production of lean meat than of fat in excess, it is more difficult to develop the lard type of hog to the highest point of excellence. At the same time these feeds are such that they will produce a profitable type of hog admirably suited for certain markets where the heavy hog is no longer wanted. [In the alfalfa-producing regions of the West, the conditions are

Our Stationery Specialty

Owing to the frequent demands for fine job work in the line of stock printing, we are now prepared to fill such orders and as a starter offer to breeders of pure-bred stock a line of stationery, neatly packed in a special case and delivered to any express office prepaid. The work will be high-class printing, first class stock. We furnish stock cuts representative of the breed. Our stationery specialty consists of

250 bill heads, printed.
500 business cards.
1,000 envelopes.
1,000 letterheads.
1 stationery case.
Kansas Farmer one year.
Shipment free to your express office.
All complete for \$10.

Address all orders to

The Kansas Farmer Company

Stock Printing Department

Topeka

Kansas

excellent for the production of lean meat.—EDITOR KANSAS FARMER.]

In the States outside of the corn-belt proper, and especially in those of the Northwest, where corn is produced only to a limited extent, wheat, peas, and barley, all nitrogenous or muscle-forming foods, may be grown abundantly, hence the farmers in these States may properly decide to meet the conditions already at hand and produce the type of hog which has been found to give best results under like conditions in older sections of the country.

The high degree of excellence in bacon production from Denmark, Great Britain, and Canada where the supply of feed is quite similar to that in the Northwest demonstrates the desirability of handling the type of swine which has given profitable results in those countries. In these same countries it would be a mistake for the farmers to introduce and persist in breeding the lard-type hog since not only would it be impossible to maintain a high standard of the type under their conditions, but seeing that a high class of bacon hogs fitted for the finest export trade may be produced, it would be a mistake financially.

Each of our large market centers has practically its own standard or type of market swine. Of late years the various types have gradually been narrowing down to one uniform type which will give best results, not only to the producer and packer, but which is also most desirable for our modern markets.

Until recently our domestic markets demanded heavier meats than those called for by the British consumer. The British market has demanded lighter, leaner meats, finished at early weights. The heavy hams, shoulders, and fat backs of the lard hog find slow sale in Great Britain. When we seek bacon hogs suitable for the production of export-bacon sides, we must look outside of the corn-belt for the type that is most desirable. While it is true that under favorable conditions, some desirable bacon hogs may be produced in the corn-belt, we can not reasonably expect this seeing that they have been bred persistently for widely different purposes. In the last ten years our home markets have undergone a decided and permanent change. The American consumer has learned that tender, juicy ham and bacon are among the most palatable and nutritious food-stuffs available if produced from animals not overloaded with fat. The most critical American trade is calling for practically the same grade of ham and bacon as is demanded by the British consumer. Without doubt the tendency will continue in this direction; consequently we turn to the bacon hog to fill the requirements. An ideal bacon hog must be smooth and even throughout and with a smooth, even covering. The back should have an even covering of fat running from three-fourths to one and one-fourth inches in thickness, evenly laid from the crest of the neck to the tail head and not thickening into a heavy patch behind the shoulders or over the loins. Given first-class bacon hogs, the packers, with their present perfected facilities for curing and handling the product and placing it upon the European markets, would, without doubt, soon command for the American farmer prices which would compare favorably with those now paid for the finest English and Danish hogs.

As to the cost of producing bacon hogs; while numerous experiments at Canadian experiment stations have shown that under their conditions, bacon hogs cost no more per pound to produce than hogs of the lard type, it is only fair to say that Canadian conditions are more favorable for bacon hogs than are those in the American corn-belt, but Minnesota and North Dakota having conditions the same as Canada, results will be the same; so the farmers outside of the corn-belt, and especially in the Northwestern States, where nitrogenous feeds are abundant and cheap, can produce hogs at a cost which will compare favorably with the cost of heavy hogs in the Middle Western States. We are satisfied it will pay hog-raisers everywhere not producing pure-bred animals, but hogs for market only, to introduce some bacon-type blood in their herds. It is a well-known fact that where corn has been fed continuously for generations, swine have become deficient in bone and muscle and lacking in ability to yield a reasonably large proportion of edible, juicy, lean meat in their carcasses. In such cases, experiments already tried have demonstrated conclusively that it will pay to use bacon-type sires for one or two crosses. It was once

thought that desirable firm, light bacon sides might be secured from undersized, underfinished lard hogs. This experiment was unsuccessful and the work has been discontinued. The most desirable cross, if a cross be desired, is with a Yorkshire boar and a Berkshire sow. The large Improved Yorkshire has many qualities to recommend him as the ideal bacon-type hog—first his color is the best: white hogs dress out cleaner and yield more attractive carcasses than hogs of other breeds. They are remarkably prolific, the writer having seen in his own experience numerous litters of sixteen to eighteen pigs with an average covering ten years of more than ten reared. Yorkshire dams are remarkably good mothers; hence, we find the young pigs are started so well in life that at 8 weeks old they should be heavier than pigs of other breeds. Some charge the Yorkshire breed with being slow in maturing, in view of the fact that a thrifty Yorkshire will take on weight until the age of 4 or 5 years, but compared with other breeds at the age of 8 to 10 months, which is the most desirable age to fulfill the packers' demand for bacon products, I am satisfied that they can not be surpassed for rapidity of growth and development.

As to their place in the United States; I do not recommend their general introduction all over the country to the exclusion of present types, which in many cases are producing maximum results with great profits. In any section of the Northwest where the production of bacon hogs is already a well-established and profitable industry, the Yorkshire is strongly in demand, and this demand will continue as the requirements for bacon types are constantly increasing.

The writer bred and handled large Yorkshires and their grades and crosses for ten years on his own farm and is thoroughly familiar with them from the farmer's point of view. Several years subsequently spent in careful study of our breeds of swine from the market standpoint in the world's greatest packing business is referred to merely to assure the American farmer that the opinions here expressed are founded on actual experience and fact.

Mr. Andrew Boss, professor of animal husbandry at the Minnesota Agricultural Experiment Station, endorses the Yorkshire breed in the following letter to Swift & Company, South St. Paul, Minn.:

"I am glad to see that you are interested in inducing the farmers of the Northwest to grow better hogs. I have been an admirer of the Yorkshire breed ever since I learned their good qualities. They are adapted to general farm conditions. I think their prolificacy and good breeding qualities make them a very desirable farmer's hog. . . . In our experience with them they have averaged I should say from three to five pigs more per litter than the lard type of hogs. . . . The feed raised on Minnesota farms is well calculated to make a first-class quality of bacon, and I believe that the product of flax, wheat, and cornfields will yield more profit per acre if fed to the bacon-type hog than it will if fed to any other class of stock."

Swift & Company, of South St. Paul, Minn., endorse the Yorkshire breed and have for some time been encouraging the farmers of the Northwest to produce more bacon hogs to help fill the increasing demand of this class of product.

Gossip About Stock.

Volume 41 of the American Poland-China Record is just received. It contains records of boar pedigrees numbered 100001 to 101901 inclusive, and sow pedigrees numbered 249002 to 256000 inclusive. Secretary W. M. McFadden, Union Stock Yards, Chicago, will be able to supply this book to breeders.

Chas. Storms, of Goffe, Kans., one of the younger breeders of Duroc-Jerseys, has some nice spring litters of pigs. He is not doing much at the business this year, owing to the fact that he has not the facilities to handle it properly, but he will move this fall to a farm better adapted for raising pure-bred pigs, and will then go into business on an extensive scale.

H. J. Northrup, of Frankfort, Kans., has some fine spring litters of Poland-China pigs. He takes good care of his hogs and he will have some bargains this fall to offer to the public. Mr. Northrup has recently added a Nemo L's Duke boar to his herd, which is one of the finest individuals we have seen this season, and if no ill luck overtakes him, we predict that he will be one of the notable herd-sires of the breed in Kansas.

This week we start the advertisement of Col. John Brennen, of Esbon, Kans. Colonel Brennen is one of the most popular of Kansas auctioneers, having officiated at most of the pure-

Horse Owners! Use

GOMBAULT'S

Caustic Balsam

A Safe, Speedy, and Positive Cure

The safest, Best BLISTER ever used. Takes

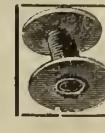
the place of all Liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish

Every bottle sold is warranted to give satisfaction Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars,

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

No More Blind Horses

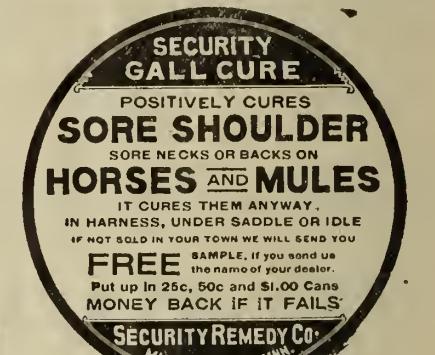
For Specific Ophthalmia, Moon Blindness and other Sore Eyes, BARRY CO., Iowa City, Ia., have a cure



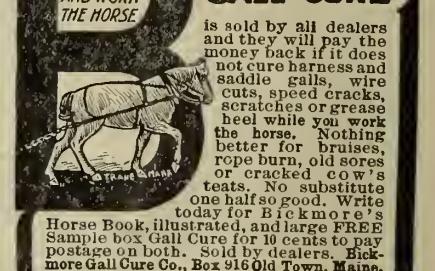
STOLL'S STAY-THERE EAR MARK.

The best and cheapest ear-mark made. It possesses more points of merit than any other make. Send for sample.

N. C. Stoll, Manufacturer, Webster, N. Y.



ICKMORE'S GALL CURE



is sold by all dealers and they will pay the money back if it does not cure harness and saddle galls, wire cuts, speed cracks, scratches or grease heel while you work the horse. Nothing better for bruises, rope burn, old sores or cracked cow's teats. No substitute one-half a grain. Write today for Ickmore's Horse Book, illustrated, and large FREE Sample box Gall Cure for 10 cents to pay postage on both. Sold by dealers. Ickmore Gall Cure Co., Box 916 Old Town, Maine.

KRESO DIP

KILLS

LICE

ON ALL LIVE STOCK

EASY & SAFE TO USE

BLUE CATTLE LOUSE
KRESO DIP
KILLS THIS AND ALL OTHERS
RED CATTLE LICE
HORSE LICE, HOG LICE
SHEEP LICE & TICKS
POULTRY LICE
DOG LICE
AND
FLEAS

Write For Free Booklets
For Sale By All Druggists

PARKE, DAVIS & CO.
HOME OFFICES AND LABORATORIES:
Detroit, Mich.
BRANCHES: New York, Chicago, St. Louis, Boston,
Baltimore, New Orleans, Kansas City, Indianapolis,
Minneapolis, Memphis, U.S.A.; Walkerfield,
Ont.; Montreal, Que.

When writing advertisers please mention THE KANSAS FARMER.

bred hog sales of Northern Kansas for some years. Colonel Brennen is always able to get good prices, and his knowledge of pedigrees and his extensive acquaintance makes him an auctioneer who is always in demand. If you are needing an auctioneer for your coming sales it will pay you to write him for dates.

One of the valuable herds of Short-horn cattle, which has been established for a number of years in Kansas, is the Meadowbrook herd owned by F. C. Kingsley, Dover, Shawnee County, Kansas. The herd now numbers 65 head of uniform red Shorthorns. The herd is headed by one of the best sires ever used in the herd, the Scotch bull, Baron Goldsmith 224633. At the present time Mr. Kingsley has for sale nine choice red Shorthorn bulls, also a number of cows and heifers that will be sold at attractive figures to the intending purchaser.

John Black, of Barnard, Kans., has just purchased a new boar from Frank Michael, the popular breeder of Summerfield, Kans. He is an August pig sired by Champion Chief 32207, by King Do Do 29307 by Expansion. Unless this animal meets with bad luck he will make a great boar. Champion Chief, his sire, was one of the good ones at Lincoln last fall, and without being fitted for show purposes won sixth place. Of course, sixth place does not sound big, but at Lincoln you may be proud if you have an animal that the judge thinks enough of to give a place and premium.

Last week we visited the herd of Frank Mitchell, of Summerfield, Kans. Frank knows how to grow pigs, and when he gets fixed for it he is going to show others that he understands the business. He has some great sows in his herd; among them being May Expansion by Expansion, Black Bonnie 96853 by Champion Chief, Lady Blackfoot 76866 by B. B. Victor 2d, Henrietta 80501 by Expander by Expansion, and Bessie B. by Expansion 3d. Mr. Michael's spring pigs are sired by Ganet's Best by Proud Monarch by Chief Perfection 2d, Champion Chief, a grandson of Expansion, and Blain's Wonder 38717 by Johnson's Chief 35774, winner of sweepstakes at Nebraska State Fair in 1902 as a yearling. When you want a good pig it will pay you to write Mr. Michael.



Herewith is a picture of C. F. Hutchinson, of Belaire, Kans., one of the directors of the Standard Poland-China Record Association. Mr. Hutchinson has been raising pure-bred swine for more than thirty years. Some of the noted hogs he has raised are Bright Look, winner of sweepstakes and first at Nebraska State Fair 1900, Guy's Price 26037, winner of first and sweepstakes Nebraska and Kansas State Fair 1903, Hutch 82287, who won second under six months at Nebraska State Fair, and Teeumash White Face 89670, who won first and sweepstakes Kansas State Fair in 1903.

Folz & Son, of Marysville, are new members of the Duroc breeding fraternity. They purchased most of their stock from John Hunt, which is ample assurance of its good quality. They have one hundred and thirty fine pigs, and intend to hold a fall sale some time in October. When the Folz's go into anything they go in to stay and to win, and we predict that in a short time they will be in the front ranks as breeders of the Duros. When a man makes a success of one thing he is pretty apt to succeed when he starts a new venture. Mr. Folz has been one of the successful farmers of Northern Kansas for many years. He recently came to Marysville from Oketo, Kans., and has erected a large, modern house that is one of the prettiest residences in the city. Put Folz & Son on your list of coming breeders.

A. B. Garrison, the well-known breeder of Poland-Chinas of Belaire, Kans., has some fine spring pigs. While he is a little shy on numbers, he is making it up on quality, and will surely have some fine fellows for his fall sale. Mr. Garrison has as fine a lot of brood sows as we have seen this year. Among the good ones are Duke's Daughter 90779, Ringtail 78328, Miss Blain 67268, Flashy Lady 82100, Minnie Faultless 82103, Beautees Coe 2d 84449, and Lady You Tell 46 64954, who is the mother of one of his great herd-boars, Prince You Tell 32204 8. This boar deserves more than casual mention. He is one of the big fellows with splendid back, hams, and legs, and well-sprung ribs. Judging from some of the gilts we saw, that were sired by him, Prince You Tell's pigs will be in great demand this fall. Mr. Garrison's other herd-boar, Prince We Know 33598 8, winner of first prize at Lincoln in 1904, was out of condition last fall, and Mr. Garrison has only a few pigs in his spring litters that were sired by him.

The enormous loss of pigs during the

past spring emphasizes the fact that the breeders of pure-bred hogs must make provision for the better care of their sows during farrowing time. Many breeders report the loss of from 25 to 50 per cent of their spring crop and in many instances the death loss can be traced directly to lack of protection from the weather. One of the lucky breeders of the State is Mr. Ben Bell, of Belaire, Kans. While Mr. Bell is one of the men who has been breeding good hogs for many years, it is only recently that he has gone into the business on an extensive scale. In a conversation with Mr. Bell a few days ago he said: "When I decided a year ago to again go into the hog business I made up my mind to start right, and at once began the erection of a modern hog-house." With the determination to spare no expense he went to work and completed one of the most up-to-date houses in the State. It was erected at a cost of about a thousand dollars. The main building is thirty feet square and twenty feet high, this part being built for the purpose of a sale pavilion. In it the seats are arranged like the seating of a circus tent, and will accommodate 300 people. Buyers attending his sale will have no fear of the storms and cold, but will be as comfortable as though by their own fireside. From the main building three wings extend, one to the east, one west, and the other south. In these wings the sows are kept during farrowing time, and the comfort and advantage of this plan is proved by the small percentage of loss of small pigs. Mr. Bell has over 200 head from his spring litters, over 60 of them being early March pigs. They are large, growthy fellows, and should bring big prices in his fall sale. He says that the saving on the loss of spring pigs alone will almost pay for his hog-house. Mr. Bell will have some fine stuff to offer this fall through the columns of THE KANSAS FARMER.

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 57 cars; Saturday's inspections were 27 cars. Early sales were at unchanged prices; later there was an advance of $\frac{1}{2}$ c to 1c. The sales were: No. 2 hard, 3 cars 84c, 1 car 83c, 2 cars 82 $\frac{1}{2}$ c, 6 cars 82c; No. 3 hard, 1 car 82c, 1 car 81 $\frac{1}{2}$ c, 5 cars 81c, 3 cars 80c, 3 cars 79c, 1 bulkhead car 78c; No. 4 hard, 1 car 78c, 4 cars 77c, 5 cars 76c, 2 cars 75c, 1 car 74c, 1 car 71c, 1 car 70 $\frac{1}{2}$ c; rejected hard, 1 car 76c, 1 car 69c, 1 car 68c, 1 car 66c, 1 car 62 $\frac{1}{2}$ c, 1 car 62c, 1 car live weevil 76c; No. 2 red, 1 car 93c; No. 3 red, 2 cars 92c; No. 4 red, 1 car 83c; rejected red, 1 car 76c, 1 car 75c; No. 2 mixed, 1 car 83c; No. 3 white spring, 1 car 82c.

Receipts of corn were 115 cars; Saturday's inspections were 61 cars. Offerings were heavy. Prices were unchanged to $\frac{1}{2}$ c lower, as follows: No. 2 white, 8 cars 48c; No. 3 white, 2 cars 48c, 3 cars 47 $\frac{1}{2}$ c; No. 2 mixed, 14 cars 47 $\frac{1}{2}$ c; No. 3 mixed, 17 cars 47 $\frac{1}{2}$ c; No. 4 mixed, 1 car 46 $\frac{1}{2}$ c, 1 car 46c, 1 car 45 $\frac{1}{2}$ c; No. 2 yellow, 1 car 48 $\frac{1}{2}$ c, 12 cars 48c; No. 3 yellow, 7 cars 47 $\frac{1}{2}$ c.

Receipts of oats were 11 cars; Saturday's inspections were 10 cars. Sales were made slowly at Saturday's prices, as follows: No. 2 white, 1 car 35 $\frac{1}{2}$ c, 4 cars 35c; No. 3 white, 3 cars 34 $\frac{1}{2}$ c, 4 cars 34 $\frac{1}{2}$ c, 1 car color 34 $\frac{1}{2}$ c, 1 car color 34 $\frac{1}{2}$ c; No. 2 mixed, nominally 33 $\frac{1}{2}$ c@34c; No. 3 mixed, nominally 33@33 $\frac{1}{2}$ c. Barley was quoted 40@43c; rye, 56@58c; Kafir-corn, 80@82c per cwt.; bran, 81@84c per cwt.; shorts, 85@88c per cwt.; corn-chop, 92@94c per cwt.

South St. Joseph Live-Stock Market.

South St. Joseph, Mo., May 21, 1906. The trade in cattle to-day showed very little change from the close of last week, although all other markets were reported lower on account of excessive supplies in Chicago. Local receipts were not large enough to supply the demand, consequently bidding was spirited and prices were well in line with last Friday. Included in the offerings to-day were good long-fed 1490-pound steers that sold at \$5.65, and there was quite a showing of good medium and plain heavy steers that sold at \$5.15@5.25, while some common to fair short-fed grassy offerings sold at \$4.75; spayed heifers light in weight and of good quality sold at \$4.80, and a pretty desirable kind of spayed heifers sold at \$4.25@4.50; these, together with good cows, sold fully steady, but commonish grasser cows and canners were weak to 10c lower on bulk. Bulls and veals are unchanged. The trade in stockers and feeders is practically at a standstill. There was no country demand and regular dealers insisted on a further decline of 15@25c, making a decline of 40@50c from the best time of last week. There was some demand for stock cows and helpers and stock bulls at unchanged prices.

Receipts of hogs at the five points to-day aggregated 75,500, a gain of 22,600 over the corresponding day last week; two-thirds of this number were centered in Chicago, where prices broke 10@15c, and this precipitated a sharp decline at all other markets. Demand here is sufficiently strong to keep values from breaking proportionately with Chicago, prices generally ruling 7 $\frac{1}{2}$ @10c lower than the general market of Saturday. Trading on this basis, however, was rather dull, and a few loads were unsold at the close. Quality offered was somewhat better than Saturday and weights were somewhat stronger. The supply consists largely of strong weight butcher lots, and good mixed packing grades. Prices ranged from \$6.20@6.35, with the bulk selling at \$6.25@6.30. Pigs were in poor supply and steady.

Offerings in the sheep division to-day were mostly lambs on which the market ruled 5@10c higher. Both wooled and shorn lambs made a new high notch for the season, the former selling up to 37.75 and the latter up to \$6.80. Demand is strong for sheep, and had there been any offered prices would have ruled somewhat higher.

WAPRICK

Kansas City Live-Stock Market.
Stock Yards, Kansas City, Mo.
May 21, 1906.

Receipts of cattle last week were moderate at 32,500, a decrease of 4,800 from the preceding week. The supply

was bunched on Tuesday, when receipts

FREE TRIAL MUELLER'S MOLASSES GRAINS



25-lb. pail.

MUELLER'S MOLASSES GRAINS is a feed for all live stock. Horses, cows, hogs, sheep, colts, pigs, and poultry thrive on it. It is made of barley-sprouts, brewer's grains and molasses, scientifically prepared and mixed—easily digested, free from drugs or medicine of any kind. It keeps live stock in a healthful, thrifty condition.

MUELLER'S MOLASSES GRAINS takes the place of corn, oats, and other mill-feeds at a saving in cost of full one-third. It is being fed more and more by the largest stock-raisers and horse-owners, and is giving universal satisfaction.

Molasses and sugar have always been recognized as containing properties of the greatest feeding value, but the problem has been, how to put them in such shape that they could be fed easily at a cost in keeping with other feeds. Mueller's Molasses Grains accomplish this, and is superior as feed to corn, oats, bran, and other mill-feeds, as it accomplishes better results at one-third less cost. It contains all the desirable properties of feed in just the right proportions to make a perfectly balanced ration when fed with hay, fodder, or other farm roughage. Molasses is one of the very few articles of food that is entirely assimilated by the digestive organs. It is all digested. It nourishes, strengthens, and fattens horses, milch cows, and other live stock, keeping them in the pink of condition, and free from disease.

It is not a medicine, but a natural vegetable food, palatable, nutritious, and economical. To prove that all claims made for Mueller's Molasses Grains are true, I will send one hundred pounds of it to any owner of live stock, that he may try it for himself. If it does not prove to be all that I claim and perfectly satisfactory, it need not be paid for.

Surely this is sufficiently liberal that I ought to hear from every live stock owner who reads this advertisement. May I send you a 25-pound pail on free trial? Fill out and mail coupon below.



Trade Mark.

E. P. Mueller,
Commerce, Street
Milwaukee Wisconsin
FILL OUT—CUT OUT—MAIL TO ME TO-DAY.

Your Name	Your Dealer's Name	No. Horses Fed
P. O.	P. O.	Cows
State	State	Hogs

St. John's Military School Salina, Kansas

A school for boys and young men who desire to prepare for college. A school that prepares its students in mind and body so that they may enter college with intelligence and vigor.

Send for catalogue and other information to

Rev. ROBERT H. MIZE, Rector, Salina, Kansas

was bunched on Tuesday, when receipts were upwards of 14,000, causing a 10@15c decline on beef steers. This was fully regained before the week's close, with some additional advance on light and medium weight grades. Top steers ranged from \$5.15@5.75, against \$5@5.85 the preceding week. A good quality of 1,100 to 1,350-pound steers brought \$4.85@5.25. Yearling steers and helpers of good quality were active at the close of last week, and the opening of this. Mixed loads sold up to \$5.30, straight helpers to \$5, and choice heavy cows at \$4.25@4.75. The stocker and feeder market was dull, closing weak to 10c lower than the preceding week's close. Stock cows and helpers closed 10@15c under the high level of the week, and stock calves lost 25c, closing dull. Veals ruled steady, at \$4.50@6. Butcher bulls and best hogbacks were firm and active.

This week opens with a moderate run of cattle, 9,000 to-day, but the local market was handicapped by a heavy run, 31,000, at Chicago. Light and handy weight steers of good quality and finish sold fully steady with last week's close. Good heavy steers were slow and weak, plain heavy ones weak to 10c lower. Top \$5.60. Butcher stock was mostly steady, but heavy cows were slow and weak to lower. Common light stockers were draggy and weak, other stocker and feeder grades steady.

Hog receipts for the week were 64,500, an increase of 6,500 over preceding week. On Saturday top was \$6.45 and bulk \$6.30@6.40, against a top of \$6.42 $\frac{1}{2}$ and bulk of \$6.32 $\frac{1}{2}$ @6.37 $\frac{1}{2}$ the preceding Saturday. To-day's receipts were fairly liberal at 8,000, but market declined 7 $\frac{1}{2}$ @10c in sympathy with Chicago, where receipts were very heavy at 50,000 and the market was 10@15c off. Top to-day \$6.35, bulk \$6.25@6.32 $\frac{1}{2}$.

Sheep receipts to day were liberal at 5,000, but the market was firm and active, spring lambs bringing \$8, shorn Westerns \$6.65, woolled Westerns \$7.65. Receipts for the week show a slight gain at 28,300. Prices advanced 10@20c and all of the gain was held. Woolled lambs reached \$7.70, and shorn lambs \$6.65. Arizona grassers, first of the season, brought \$8@8.10, against \$6.25@6.26 a year ago. Texas grassers \$8.67 $\frac{1}{2}$ against \$8 a year ago.

J. A. RICKART.

A Home For Half the Money

In the Pacific Northwest. A handsomely illustrated 88-page book.

"OREGON WASHINGTON IDAHO AND THEIR RESOURCES"

Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

A. L. Craig,

ROOM 212 WORCESTER BLDG.,
PORTLAND, OREGON.



KENDALL'S SPAVIN CURE
Continues to be the one reliable remedy for Spavins, Ringbones, Curbs, Splints and all forms of lameness.

KENDALL'S SPAVIN CURE
comes promptly, packed in
one ounce bottles. Price 75c
each. Send for free
book, "A Treatise on the Horse," free.

Dr. B. J. KENDALL, O.O.
Enosburg Falls, Vermont.

Home Departments

CONDUCTED BY RUTH COWGILL.

A Parent's Funey.

Eight boys and girls I call my own,
And flaunt the fact with ringing tone.

With less than eight my joy were less;
But eight will do, I do confess.

Oft I am bold enough to state
I have but one, instead of eight—

One perfect child, so I maintain,
Instead of eight, with spot and stain.

I take the good in each dear soul,
And add all up to make one whole.

And that one, you may plainly see,
Is just as good as good can be.

Thus 'tis not eight I have, defiled,
But only one, a perfect child.

How now? Say not the bad, combined,
Makes, likewise, one of demon mind.

Such view, indeed is not from me;
Such view my fond heart can not see.

I know but this: My eight possess
A rounded orb of nobleness.

—J. E. Everett.

Children's Rights.

It is considered by some that the children of the present day have too many rights, and they long for the good old days of their grandsires. Perhaps some of the rights allowed them are not the ones best for them. The most important ones and the ones which are most often disregarded are those about which the child can have nothing to say and have no choice in the matter, and about which too many parents feel no responsibility. A child deserves, first of all, to be well born. One of the greatest blessings parents can bestow on their children is the right choice of their ancestors, as far back as grandparents at the least.

It is not necessary that the great grandparents were among those who came over in the Mayflower and settled in or near Boston, or that in their veins flows some of the old Virginia blood, but to be well born is to be placed in the world with a sound, healthy body and well-balanced and perfectly shaped brain; with no taints nor hereditary curse to follow them through life. Farmers and stockmen have learned to produce finer horses and cattle and even hogs by giving thought and practice to these things. Is a boy or a girl—a human soul—of less value than these?

It is not my intention to enter into a discussion as to which is the most important—to be well born or to be well trained—and if I should we would be no nearer a conclusion than before, for both are important. But I am satisfied that a child that is well born has a great deal better chance in life than the one who has in his body the ills of generations behind him, or their moral taint to battle with. He is handicapped to begin with. It is unkind of the father and mother to neglect the training of the children, and in after life when the truth of the matter dawns upon these same children they will blame and censure the for this neglect. Have you not seen the child who is left to his own self without restraint or discipline? How unhappy he is! He is discontented, hard to please, and selfish. And when he goes out into the world of temptations—where will be his strength to battle against them? He has never practiced self-denial. He has always had his own way and followed his inclination. Why not now? To discipline a child is not to break his will, and crush his self-respect. To do that is the other extreme to which some go, but it is not discipline. It is to teach him to be master of himself, to make him strong and self-reliant. Burbank has spent years of study and toil to produce the best results in plant-life. Why is so little attention given to the birth and training of our boys and girls?

Once upon a time a farmer had among his many swine a little pig that was puny and weak, and he thought it was not worth while to bother with it, and he gave it to John. John had never had any live thing of his own before, and was delighted to have it. He cared for it patiently and devotedly, and it lived and flourished and became in time a real hog—of the swine family—and John felt rich. But father sold the hogs and this one among them, and pocketed the money. Were they not all his—and John, too? Could he not do what he pleased with his own?

But John did not look upon it in

that light. The hog was his. Father said it was, and he felt that he had suffered an injustice in the transaction. He had laid great plans about what he should do with the money—perhaps invest in more of the same kind, his plans reaching far into the future. Can you wonder if a little later he leaves the farm and goes out into the wide world to see if it is any kinder?

Seasonable Recipes.

Strawberry Blanc Mange.—A few berries may be made to go much farther made into a blanc mange. Make the blanc mange in the usual way (there is always a recipe on the corn-starch box) and when ready to pour out stir into it a cup of strawberries cut into small pieces. Cut a few of the larger berries in halves and place three or four in the bottom of each cup before pouring in the starch to mold, so that they will be on the top when turned out. Nice served with strawberry sauce made by crushing strawberries and adding syrup of white sugar to thin and sweeten.

Strawberry Shortcake.—For five persons, wash one quart of strawberries, drain well, add one-half cup sugar and crush. For the crust, sift three teaspoons baking powder with one quart flour, rub in butter the size of a large egg, add sweet milk to make a soft dough. Bake in three layers, put the strawberries between the layers, saving a little to put on top, enough to moisten it; then cut large strawberries in halves lengthwise and cover the top with them. Nice either with plain cream or with whipped cream.

Escalloped Asparagus.—Boil asparagus until tender, then drain, and place a layer in a buttered baking dish which has been well sprinkled with bread-crums. Sprinkle the asparagus with chopped hard-boiled eggs, pepper, salt, and grated cheese, and proceed in this way until the pan is full, having the top layer of asparagus. Pour over it a cupful of thin white sauce, sprinkle with buttered crumbs, and brown delicately in a hot oven.

Asparagus with Eggs.—Boil asparagus until tender, then place in a buttered baking-dish; season delicately with salt, pepper, and a pinch of nutmeg. Beat the yolks of four eggs until light, add two tablespoonfuls of cream, two level teaspoonfuls of butter, a little more seasoning, and the whites of the eggs beaten to a froth. Pour over the asparagus, set in a hot oven, and bake until the eggs are set.

Asparagus and Green-Pea Croquettes.—Mash one cupful of cooked asparagus tips with one cupful of cooked green peas; season with salt and pepper, add one-half tablespoonful of melted butter and one beaten egg. Let get cold, mold into small croquettes, roll in breadcrumbs, then egg, and again in breadcrumbs. Fry in hot oil or fat, drain a moment on glazed paper, and serve at once.

Asparagus Salad.—Ice cooked asparagus tips and mix them lightly with finely-minced young onion. Serve ice-cold in little nests of tender lettuce leaves with a little French dressing poured over. A cream mayonnaise is also a delightful accompaniment, and especially if the iced asparagus tips are mixed with an equal amount of iced green peas.

Outdoor Life.

The magic breath of spring is in the air, even though it be a little chilly for the passing moment, and beauty is budding and blooming everywhere. The outdoor season is at hand. Good Health, an excellent publication, suggests that as soon as the weather will permit everybody should live on the porch, do their reading, sewing, eating, lounging, and napping there. There is nothing more healthful than living in the open air. Condensing Good Health's suggestions the Baltimore Sun says:

"The parlor ought to be deserted in summer for the open air, and the dining-room likewise. With hammocks and easy chairs a delightful existence there is practicable, and a stay there is much more health-giving than in the contaminated air of a bedroom. Many persons nowadays spend the night on the porch in summer, and not a few find the air better there in winter also. There are porches and porches. A bare, bleak porch exposed to the sun has its drawbacks, but it

can be made attractive by planting around it in the spring quick-growing vines. Clematis, woodbine, trumpet flower, ivy, and honeysuckle can be planted later for perennial shade. The morning-glory is a rapid grower and will give in a few weeks the desired privacy and shade. The scarlet creeping bean is said to grow six and three-quarter inches in one night. One of its merits is that it attracts hummingbirds all the summer long. Porch furniture is now made in many styles, including the indispensable table for books, magazines, etc. Hanging baskets with flowers and ferns have a decorative effect. Everything is to be added that will charm the household from the house into the open air."

Outdoor life, exercise, is better than medicine. It is good for the body, the mind, and the soul. The approach of the outdoor season should be also the cleaning season. The spade and the hoe, the broom and the paint brush should be brought into activity. Nature always does her part; let man do his. Clean yards and lawns, rear as well as front, clean streets and sidewalks, trees, grass, flowers, vines, these are necessary to cleanliness and beauty, such as give satisfaction to the eye and repose to the mind. There are many ways of living. Some do not live; they merely exist. Some persons of wealth only half live. To labor to live may be a necessity, but to live to labor is a duty. There is a wealth of beauty and loveliness that may be enjoyed by all. But there is no beauty without cleanliness, and outdoor life with dirty surroundings can not be attractive.—Nashville American.

Prevention of Moths in Furs and Woolens.

The moth insect begins to fly freely about the house as soon as warm weather begins, usually the latter part of March for Rochester, N. Y. After this date it is not safe to have furs or woolen clothing hanging about where the moths can get at them. The moth fly lays its eggs in the furs of woolen garments, which hatch into little maggots which feed upon the wool or fur, or the hide itself, thus ruining it in a short time.

Remedy: Take ordinary tarred paper fresh from the roll and cut it in such shape that it will cover the under part and the upper part of the garment when properly folded to go into a box. Place the fur or the woolen garment inside this fold of tarred paper, then place it in a tight paper box with a tight-fitting cover. Or, better, place it in a tightly sewed bag and tie the open end of the bag so tight that no insect can enter. If a tight paper box is used after the cover is put on, paper should be pasted over the crack or lamb in such a way as to make it impossible for the smallest insect to get into the box.

At the fur stores you can have your garments taken care of by paying from \$1 to \$5 each for the summer season, but this is expensive. At the fur stores they examine the garments each month, and if they see the slightest indication of moths working, they apply suitable remedies, whipping the garments lightly and exposing them to the sunshine for a brief time only.

Garments worn once in two to four weeks are seldom attacked by moths for some reason. If you have valuable furs to care for it is best to examine them at least once a month. Dyed furs, like sealskins, moths do not attack. Furs of natural colors, such as mink, the moths will attack freely.—Green's Fruit Grower.

Refined Pork.

Harold was playing "keep store" and had prevailed upon his grandmother to become one of his patrons. When she appeared in the role of customer he said:

"Have some nice vegetables or fruit or meat? Here is some extra nice boiled ham. Have some?"

"No, thank you," she said, "I don't like ham."

"Oh, but I think you'd like this, Ma'am. It is hardly a bit hammy."—Lippincott's.

Butter with a fishy taste has aroused complaint in Australia, where investigation has shown that the flavor has no connection with fish, but is due to one or more of four micro-organisms. The rusty iron of cans was found to have a bad effect on milk and cream.

One Fare for Round Trip

Plus \$1 from Chicago to Boston and return, via Nickel Plate Road, May 31 to June 9, inclusive. Also excursion rates via New York City. Extended return limit July 15. John Y. Calahan, General Agent, Room 298, 113 Adams St., Chicago. (3)

U.M.C.

SHOT SHELLS

go on a wild goose chase for Shot Shells?

U. M. C. Shells double your chances because they bring them down "just out of range." U. M. C. are the Shells for your gun.

U. M. C. cartridges are guaranteed, also standard arms when U. M. C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY BRIDGEPORT, CONN.
Agency, 313 Broadway, N.Y.

Death of Floral Lawn Cause, Smothered by Dandelions

The dandelion pest has had its day. For one dollar you can get an instrument that can be used by women and children as well as men that will pull dandelions and other noxious weeds at the rate of one thousand an hour, and leave not a drop of dirt nor a visible tear in the sod. No stooping nor bending and is a pleasure not a task to operate it; delivers automatically the weeds pulled, and your hands are not soiled, nor your back tired, no grunting or humping around to do your work. Pulls any dandelion or weed when tap root does not exceed 16 inches in length. Send one dollar and we will deliver free at your door.

The Standard Incubator Co.
PONCA, NEBRASKA

KANSAS BUSINESS COLLEGE

YOUNG MEN AND YOUNG WOMEN Here is a school in its own home, costing \$40,000. Steam heat, electric lights thoroughly modern equipment. Our Employment Bureau places all competent graduates. We send stenographers, bookkeepers, and commercial teachers to all parts of the world. Business, Stenographic, preparatory, Civil Service and Special Pen Art Department. Tuition low, good board cheap, advantages unsurpassed. Special summer rates. Write Kansas Farmer for particulars. T. W. Roach, Supt., Box D, Salina, Kans.

If You Educate For Business

you will naturally select the best modern business training school to be found.

The Central Kansas Business College

Why? Because its graduates are successful. Teachers professional. Methods new. Equipment largest in the Middle West. Indorsed and recognized by all commercial schools in America. Employment department through which every competent bookkeeper and stenographer from our school is secured a position. The mecca for fine penmanship and training of commercial teachers. Location of school and city most excellent. Tuition moderate. Board and room cheaper and better than elsewhere. No vacations, school in session every day in the year. Moral tone of the college unequalled anywhere. For further particulars address,

H. A. Andreson, M. A.
Abilene, - - - Kansas

The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture, and Veterinary Science. Also short courses in Agriculture, Dairying, and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,
BOX 50. MANHATTAN, KANSAS

The Young Folks

As You Go Through Life.
Don't look for flaws as you go through life.
And even when you find them,
It is wise and kind to be somewhat blind.
And look for the virtue behind them,
For the cloudiest night has a hint of light.
Somewhere in its shadows hiding:
It's better by far to hunt for a star
Than the spot on the sun abiding.
The current of life runs ever away
To the bosom of God's great ocean—
Don't set your force 'gainst the river's course.
And think to alter its motion,
Don't waste a curse on the universe,
Remember, it lived before you;
Don't butt at a storm with your puny form,
But bend and let it go o'er you.

The world will never adjust itself
To suit your whims to the letter;
Some things must go wrong your
whole life long.
And the sooner you know it the
better.
It is folly to fight with the Infinite,
And go under at last in the wrestle;
The wiser man shapes into God's plan
As water shapes into a vessel.
—Ella Wheeler Wilcox.

Fleetfoot; the Autobiography of a Pony.

MARION SEWELL.

CHAPTER XII.—THE NAME WAS MAUD.
I made no mistake when I prophesied for myself a sleepless night in Mr. Floyd's stable. While I was still nibbling at the hay piled high in my manger, flashes of light repeatedly quivered before my eyes, and about the same time loud, rumbling sounds which I recognized as thunder caused me to prance around nervously, but the disturbed condition of the elements affected the yellow mule a great deal more than it did me, for he seemed to have lost all control of himself. The present excitement, added to his fiendish temper, served to make him anything but a comfortable companion. Every time the lightning flashed he would rear up on the manger and snort viciously, and the thunder which followed gave him an excuse to kick either the partition which separated us, or the wall behind him.

After about four hours of this strenuous performance, a heavy board was hurled across the stable, striking me with some violence on the knee. The next time my stall was lit up I observed that the dividing wall was completely shattered, and the fact that there was now no barrier between us worked his muleship into an added fury.

Presently the rain commenced coming down in torrents, and aside from the endless pouring sound upon the roof, all signs of storm disappeared. In the beginning of the blessed peace, the yellow mule suddenly became calm. Whether he had exhausted himself to the point of sleep or whether he dropped in a fit of apoplexy, I neither know nor care; all I am sure of is that he was quiet at last.

The next morning when I awoke in the light of a calm and beautiful day it seemed as if some tragic wreck had taken place in the night, for splintered boards were scattered everywhere, and a window, jarred from its casings, filled my stall with fragments of broken glass. In the midst of the debris the yellow mule lay with neck outstretched, sleeping the sleep of the unjust.

Later on, when Marcella was leading me into the barnyard, I could not resist a final glance at the mischief-maker. He hadn't as yet stirred and I could not see that he breathed. A wicked sense of elation for a moment took possession of me, but I banished it at once, for I am a good pony and not in the habit of wishing any one evil. However, I did not think it possible for this mule to be alive and at the same time so peaceable. I was debating this question in my mind when Daisy, who was holding a gate open, grew impatient. "Oh, come on!" she called to Marcella. "My feet are freezing in this old mud. Pony takes such an interest in Maud that we will have to hitch them up together one of these days."

I passed quietly through the gate, but at the same time I had positively decided that if the day ever came when I should be "hitched" with this new acquaintance, there would be some kicking done, and Maud wouldn't do it all, either.

CHAPTER XIII.—TURBULENT WATERS.

In spite of the kind treatment I had received at Daisy's house I was overjoyed to turn my head in the direction of home. The thought of Big Jake

with his fund of good humor and hard sense filled me with pleasure, and I wondered, if he had been in my place the night before, if Maud would not have learned a valuable lesson in self-control.

But now that my unhappy experience was over I was willing to forget it as far as possible, and waited restlessly for Marcella to saddle me and mount. Daisy, not liking to part with us, kindly offered to accompany Marcella home, and in consequence seated herself cozily behind.

With a light heart and feet that were by no means heavy, I started off. The roads were beaten firm by the recent rain, and here and there large pools had formed through which I trotted gaily, spattering mud in all directions, much to the merriment of my little friends.

The houses which we passed looked as if they had been newly painted, and the fields of grass, that yesterday presented a dried and dead appearance, were now all shining in their dresses of soft green. At times racing along smooth turf, and again stopping a moment on the top of some convenient hill to admire the glowing scenery, we in good season came to where the creek, which was almost a river, crossed the highway underneath a broad, wooden bridge. Just now this structure was not in sight, for the creek, influenced by the heavy downpour, had left its banks and rushed in a wide and roaring current over the bridge and created a sea of water on both sides. The scene, which I considered one of grandeur, impressed more than frightened me, and it took very little urging to bring me to the very side of the overflowed district.

Marcella and Daisy, both being of a mermaid tendency, were greatly pleased with what they saw, and clapped their hands and shouted at the various things that floated by. Several short, round logs sailed past in majestic rotation, and the little girls called them vessels on the Atlantic Ocean, and tried to give them names; sometimes they had to hurry with the christening process, for the so-called ships were going very fast. Once a live pig bobbed squealingly along, an occurrence which called forth exclamations of pity, and I am sure a rescue would have been attempted by my young riders had not the pig been hurried out of sight. Then came a small flock of geese, and as they did not seem to be in any particular distress, the girls laughed and called a loud "quack, quack," whereupon one impudent old fellow flapped his wings and screamed "quack, quack." After that there were more logs and rails and a little house that was built for sheep. As it was getting near noon, Marcella suddenly remembered that her mama desired us home before dinner time, and wondered what we had better do.

"Why, go on, of course," advised Daisy, unconcernedly. "How else do you propose to get there?"

"But," remonstrated Marcella, "we might get drowned."

This cowardly suggestion caused Daisy to fall into convulsions of laughter. "Why, Marcella," she gasped, "ain't you afraid you'll get drowned in your teacup?"

"I don't know as there is anything so funny about it," returned Marcella, in an injured tone. "The water's roaring horrible, and we can't see the bridge at all."

"Course we can't see the bridge, because there's a few inches of rain over it, but if you'll change with me and let me have the reins I can make a pretty good guess where the bridge is."

Reluctantly Marcella consented, and Daisy, seated in the saddle, gave the sharp command, "Go on now, Pony."

With some misgivings I obeyed, slowly at first, but finding that the water reached only to my knees, began to make more haste. Like Daisy I could form a pretty good guess where the bridge was, and after some little maneuvering I placed my feet on the hard boards. Here, too, the water was not very deep and I gained confidence every moment. But alas! the time of my triumph was but short, for when I had proceeded only a few paces, the bridge began to rock and sway, and instantly, with the horrified screams of the little girls ringing in my ears, we sank down into the raging waters and were all covered up with foam.

Blinded and choking, I plunged wildly until my feet struck something hard, which I naturally supposed might be the missing half of the bridge. This was surely what it was, and by climbing upon it entirely, I was sufficiently elevated to keep my head above water. Standing there, trying to recall my breath, which the shock had momentarily swept from me, I was relieved to hear Daisy say, "You cling to me,

LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,** New York



A CONCRETE SILO
Gedney Farms, White Plains, N. Y.

Portland Cement Concrete has become the recognized building material where strength, durability and sanitary conditions are demanded. Our new book

"Concrete Construction About the Home and on the Farm,"

has just been received from the printers. It contains photographs, descriptions, specifications and sectional drawings for many of the smaller structures that can be built without the aid of skilled labor by the suburbanite or farmer; also much general information and many valuable hints to small contractors.

A copy of this book will be sent free upon request

THE
ATLAS PORTLAND CEMENT CO.
30 Broad Street :: New York, N. Y.

Cheap Excursions Southwest

Low Rates each first and third Tuesday, monthly

Round-trip tickets sold from nearly all Rock Island points in the North and Central West to practically all points Southwest.

Rate about half the regular fare.

Pluck means sure success in the Southwest. An illustrated book or two will help you to a better acquaintance with the country. I'll be glad to send them on request. State the section which most interests you.



A. M. FULLER, C. P. A.

TOPEKA, KANSAS

EXTREMELY LOW RATES



To California, Oregon, Washington, and Points East

Homeseekers rates to points in Arizona, Colorado, New Mexico, Texas, Indian Territory and Oklahoma, on 1st and 3rd Tuesday of each month.

Steamship Tickets To and from all parts of the world. Lowest rates and best lines represented. Address

W. E. KING, G. P. & W. A., TOPEKA, KANSAS.

Marella, and I'll hold to the saddle," and brave Marella answered, "Yes, if we can hold tight I know Pony will save us."

Encouraged by my little mistress' faith in me, I started to swim down the stream, dodging with much difficulty the many things which were beginning to collect along the creek's side. Keeping in mind the precious burdens depending on me, I put forth my best efforts, taking long and careful strides in the direction of safety, and before I realized the possibility of such a happening I was standing on dry land.

"Oh, Pony! Pony!" spluttered Marella, and between hysterical laughing and crying both girls slipped off my back down on the ground.

Just then Mr. Dearrot drove up, the horses steaming and panting, his appearance frightening me a great deal more than did my experience in the water.

"Oh, children! what have you done?" he asked brokenly, as he gathered up both excited culprits, and wrapping them snugly in a warm blanket he turned his horses' heads and drove rapidly home, leaving me in deep meditation on the side of the bank. I was a little lonely as I made my way later on to the barn, but my slight heartache was forgotten when I went into Big Jake's stall and received his warm greeting.

The next day I was made happy again, for Marella and Daisy were both on hand, neither being any the worse for their recent adventure.

(To be continued.)

The Little Ones

The World.

The world is such a pleasant place
For any child to be,
With pleasant things to sing about
And pleasant things to see,
And other little children near
And pleasant roads to go,
And many things a-happening
Which only children know.

The world is full of apple-trees
And stony walls to climb,
And buttercups and meadow-sweet
And all the summer time,
And singing brooks where cowslips
grow.
And children wade and fish,
And blackberries as large and sweet
As any child may wish.

The world is full of giants bold
And princesses and elves,
When little children sit alone
And whisper to themselves.
The world is full of blocks and dolls
And toys a rainy day,
And little children everywhere
Who always want to play.

The world is full of lullabies
And loves for little heads;
And mother-dears to sit beside
The sleepy trundle beds,
And pretty dreams to run among
As far as you can see—
The world is such a happy place
For any child to be.

—Carolyn S. Bailey.

An Indian Legend—the Fox and the Rabbit.

There was a village, and in the village dwelt a pretty girl. All the young men were courting her, but none had been able to marry her. Even the animals were in love with her. So one day a fox thought he would go and visit the girl. So he started, and on the way he met a jack-rabbit. The fox asked the rabbit where he was going, and the rabbit said: "I am going to see the pretty girl in the village." "Well," said the fox. "I am going there, too, so we might as well go together." "Very well," said the rabbit. So they went on together.

When they came to the lodge, the rabbit was the spokesman. They were invited into the lodge. The rabbit did all the talking to the girl. The rabbit whispered to the girl and said: "Do you see yonder fox? I rode him when I came to see you." So the rabbit soon left and went to his home.

The fox then went up to the girl, and said: "What did the rabbit have to say?" The girl said: "The rabbit said he sides you whenever he comes to see me." The fox was mad when he heard what the rabbit had said.

So the fox went to the home of the rabbit and when the rabbit saw him coming he knew that the girl had told him what he had said and also knew that the fox was mad. So the rabbit lay down and began to groan, as if he were in great pain. When the fox got there he said: "What have you been saying to the girl? You never rode me, and I want you to go with me and tell and I want you to go with me and tell the girl that you told a lie; that you do not ride me." "But," said the rabbit, "I can not go for I am sick. I can

not walk." But the fox wanted the rabbit to go. So the rabbit said, "Let me ride you, and when we get to the girl's lodge then I can get off." So the fox let the rabbit ride him. The rabbit kept on falling off, so he asked the fox if he could put a rope around him, and the fox said: "All right." So the rabbit went for a rope and got his quirt also. The rabbit rode the fox until he got to the entrance, then the rabbit jumped off and handed the rope to one of the servants.

The girl saw the rabbit, and received him. She took him in. She talked to the rabbit a long time, then said: "Mr. Rabbit, I refuse to marry you, for you have such a big nose." The rabbit went out and never returned.

The fox then tried to marry the girl, and she refused him, for the rabbit rode him. Then the fox left and went into the timber. The fox felt so badly that he kept on running, and ever after that was afraid of people.—Indian School Journal.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. E. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalitso Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literatur Club, Ford, Ford County (1903).
Sabean Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County (1902).
Taka Embroidery Club, Madison, Greenwood County (1902).
Prentis Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russel, Kans.
The Sunflower Club, Perry, Jefferson County (1903).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
West Side Study Club, Delphos (1906).
Domestic Science Club, Berryton, Shawnee County (1906).
Mutual Improvement Club, Vermillion, Marshall County (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

It is a gratification to me to receive so many encouraging reports from the clubs. I am sure it is interesting as well as encouraging to the other clubs

**Food to work on is food to live on.
A man works to live. He must live
to work.
He does both better on**

Uneeda Biscuit

the soda cracker that contains in the most properly balanced proportions a greater amount of nutriment than any food made from flour.

Uneeda Biscuit

NATIONAL BISCUIT COMPANY

5¢

RENT PAYS FOR LAND

FERTILE SECTIONS OF THE SOUTHWEST, WHERE
LAND SELLS FOR \$15 AND RENTS
FOR \$5 PER ACRE

One of the remarkable things about Eastern Arkansas and Northern Louisiana is the fact that cleared land rents for \$5 per acre cash, and can be bought for \$7.50 to \$15 per acre. It costs from \$6 to \$10 an acre to clear it. Other improvements necessary are slight and inexpensive.

The soil is rich alluvial, or made. It produces a bale of cotton per acre, worth \$45 to \$60. This accounts for its high rental value. Other crops, such as corn, small grains, grasses, vegetables and fruits thrive as well.

Alfalfa yields 4 to 6 cuttings, a ton to a cutting, and brings \$10 to \$16 per ton.

In other sections of these States, and in Texas as well, the rolling or hill-land is especially adapted to stock-raising and fruit-growing. Land is very cheap, \$5 to \$10 per acre; improved farms \$10, \$15, to \$25 per acre.

The new White River country offers many opportunities for settlers. High, rolling, fine water—it is naturally adapted to stock- and fruit-raising. Can be bought as low as \$3 per acre.

See this great country for yourself and pick out a location. Descriptive literature, with maps, free on request.

The Missouri Pacific-Iron Mountain System Lines sell reduced rate round-trip tickets on first and third Tuesdays of each month to points in the West and Southwest, good returning 21 days, with stop-overs. For descriptive literature, maps, time tables, etc., write to

H. C. Townsend, G. P. & T. A.,
St. Louis, Mo.

A Great Fountain Pen Offer

Our Best \$1 Fountain Pen and the Kansas Farmer one year, both pre-paid \$1.50
Our best \$1.50 Fountain Pen and the Kansas Farmer one year, both \$2.00
Our best \$3 Fountain Pen and the Kansas Farmer one year, both \$3.00
prepaid.....

Fitted with solid gold pens, will last 15 years. All pens guaranteed. Our stock is the largest west of Chicago. We refer you to any bank in Topeka or the Kansas Farmer

M. L. Zercher Book and Stationery Co.,
Topeka, Kansas

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy, is complete without one. Price, \$1; postage paid any part of U. S. Address

E. T. Davis Co., Tippecanoe City, Ohio
Send your orders quick.

Madison, Kans. A MEMBER.

Miscellany

The Movement in Kansas for Better Roads.

PROF. W. C. HOAD, KANSAS STATE UNIVERSITY.

(Continued from last week.)

IMPROVEMENTS ON THE PRESENT SYSTEM.

In the past in a majority of the counties both the property tax and the poll tax have been allowed to be "worked out" on the road. The writer believes, in the first place, that all road taxes, including the poll tax, should be paid in money. When such taxes are worked out, it is well known that between the lack of skill in the workers, the inability of teams to work well together, the doing of practically all road-work in the late summer or fall, when people are less busy with farm work, instead of when the roads need the attention, practically half the tax is wasted. This is so thoroughly recognized that it scarcely seems worth while to mention the various advantages of a tax paid in money, the same as other taxes, but one point in favor of the plan is sometimes overlooked, and may properly be spoken of. Every one who has had to work the soil in any way, whether it be to farm a crop or to dig a ditch or to work a road, knows that more important than machinery or methods is the matter of taking advantage of favorable soil-conditions, and of working with nature instead of against her. The road-overseer finds that with the cash in his hand he can get the road-work done not only in the right way, but also at the right time, which is of even greater importance. Almost any trustee or road-overseer will tell you that he could get better results with from one-half to two-thirds the amount of the tax if it were paid in cash instead of in work; and this is just as true of the poll tax as of the property tax.

In the second place, the writer feels sure that the prevalent methods of road-work are by no means the best possible. Too much reliance has been placed upon the plow and scraper and grading-machine, and too little attention paid to matters of drainage and continuous repairs. It is now pretty generally recognized that the method of road-maintenance usually practiced—that of a general tear-up in the late summer or fall—is based upon an entire misconception of the scientific principles involved in the problem of adapting a soft material like earth to the purpose of a road-surface.

The county, and not the township, should be the unit of road-administration. The township is too small to be the most efficient unit, for the main roads usually traverse two or more townships whose interests or inclinations in the matter of improvement may be very divergent; or the people of one township may largely use a thoroughfare to town lying almost wholly in another township. With the county as a unit, systematic methods of improvement and maintenance can be more easily applied, and standards for road cross-sections, ditches, culverts, and subdrainage can be adopted and maintained. Moreover, and perhaps more important than these, if the county is the unit it will be possible to place all road- and bridge-work under a county engineer. Ordinary road-work, as now, could be under the direct charge of the township trustee, who would be assisted by the proper number of road-overseers. All culvert- and bridge-work, however, and all special road-work should be under the county engineer, who should make surveys, draw up designs, prepare plans and specifications, inspect work, and make reports to the county commissioners. This would relieve the township trustees of a large part of the work connected with bridges and drainage, while it would place these larger matters of special road-work requiring technical knowledge under the charge of an expert. This county engineer should be a practical man, well informed and experienced in all matters relating to drainage, rocks and soils, grades, concrete, and all forms of construction work. He should give his whole time to this work, and could earn his salary two or three times over.

The writer does not believe it to be practicable or advisable that the State should be looked to for any direct financial aid in the building of hard roads. The conditions in Kansas are very different from those in the closely built-up Eastern States, where State aid to road-building is deservedly so popular a movement. He does believe, how-

ever, that there should be a permanent State Highway Commission, whose duty it would be to study the road conditions of the State, to collect and disseminate information concerning the plans and systems of highway improvement and maintenance best suited to the needs of the different sections of the State, and to the different classes of roads; to study and test the various stones, gravels, and other materials available for road-making, and to make the information available to any county officials or others undertaking road-improvement.

Now let us see how this would work out in a concrete case, that of our typical county. The county has, as before stated, a population of 21,400; the population of the county seat is about 5,000. Besides this there are about a half dozen small towns with populations of from 300 to 1,000. The area of the county is 708 square miles, and its taxable valuation is something over five million dollars.

The county has 1,416 miles of roads, or two miles of road per square mile of area. Of these 1,416 miles, about twenty per cent, or 282 miles, are what may be called main-traveled roads. These are the thoroughfares of the county—the main roads leading from the well-built-up communities inward to the county seat or other town, the direct interurban roads, and usually a main road along each important stream-valley. Along this twenty per cent of the road mileage, and within a mile of the thoroughfare, will live probably fifty per cent of the total rural population. More than this, these main roads will carry probably seventy-five per cent of the rural traffic of the county. The writer believes that the system of road-administration of the county should be broad enough and far-sighted enough to look forward to the building of permanent roadways, along at least half of these thoroughfares. By permanent roadways the writer means in general broken stone or gravel roads. Of course, this can not and should not all be done at once, but a start should be made as soon as the conditions warrant it, and an increasing amount should be completed in each succeeding year.

In view of our present makeshift methods and our customary attitude toward the whole road question, this seems a rather large thing to undertake. And yet it is a perfectly practicable and a very reasonable thing to do. The valuation of our typical county is about five million dollars. Suppose a three-mill levy were regularly imposed for permanent work on these thoroughfares. The \$15,000 a year resulting from this tax would be sufficient for the construction of five miles of broken stone road, or, if the real estate on each side and within a half mile of the thoroughfare were to bear, say, five per cent of the cost of the improvement, the \$15,000 would provide for about six miles of permanent road each year. If good gravel could be obtained, the length of road built with the same funds could probably be increased to eight or ten miles. These estimates assume that the broken stone or gravel would be hauled an average distance of not over three miles, and that an excessive amount of grading would not have to be done.

The writer speaks of a general tax levy of three mills over the entire county only by way of illustration. In his judgment in planning for hard roads, it would usually be better to have it arranged so that for any particular road-improvement, such as the macadamizing of three or four miles of thoroughfare, a special road-district would be formed in very much the same way as in the case of a drainage-district. The whole improvement would then be placed in the hands of a district commission, who would attend to the building of the road, and assess the cost in proportion to the benefits received from the improvement.

THE ADVANTAGE OF EARTH ROADS.

What has been said concerning hard roads relates only to the thoroughfares of the county, constituting only perhaps twenty per cent of the entire mileage. Some over-enthusiastic good roads advocates have assumed that all, or practically all, roads should ultimately be macadamized, and have pictured a golden age of life on earth when that time should come. The writer maintains, however, that for this remaining eighty per cent or more of the total road-mileage, the dirt road is the proper and the best form. He believes thoroughly in the usefulness and efficiency of the plain dirt road, and he resents the suggestion, sometimes made, that it is only a makeshift



**SIMPSON - EDDYSTONE
Shepherd Plaids**

Dainty checks that make bright, beautiful Spring and Summer dresses. The standard of quality. Permanent, fadeless color.

Ask your dealer for
Simpson-Eddystone Shepherd Plaids
Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



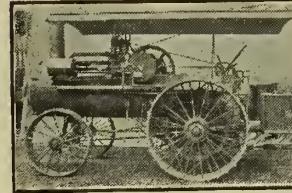
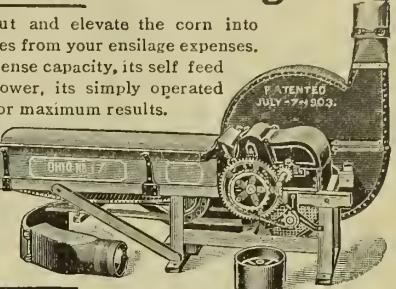
How About YOUR Ensilage?

"OHIO" Ensilage Cutters cut two ways—cut and elevate the corn into silo at an amazing speed; and cut off huge slices from your ensilage expenses.

How does it "cut" expenses? By its immense capacity, its self feed mechanism, its power-saving direct draft blower, its simply operated silage distributor, its minimum use of power for maximum results.

Silage as a milk and beef producer is far superior to grain. Our book "Modern Silage Methods" (10c) tells all about it. Our Silage Cutter Catalog will easily convince the man who wants the best. Send for it. Manufactured only by

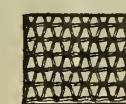
The Silver Manufacturing Co., Salem, Ohio.



The Lowell Manufacturing Co.

SALINA, KANSAS

Leather and rubber belting and thrasher supplies of every description. We have for sale at a bargain ten second-hand thrashing outfits, many of them as good as new. Long distance phone 432. Mention Kansas Farmer when you write.



Thirty-One Styles of Farm Fencing

Sold direct to consumers on thirty days trial at wholesale prices. Catalogue free.

THE FARMERS' FENCE CO.
Box 36. Meivern, Kansas

Great American Desert Seeds

are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drouth tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.

M. G. Blackman, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED

MCBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices

GARDEN CITY, KANSAS

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.

PETERS & SKINNER, No. Topeka, Kans.

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.

Hart Pioneer Stock is pure bred and produces heavy crops.

Value received for every dollar sent us. No Agent's Commission.

WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.

HART PIONEER NURSERIES, Established 1865. Fort Scott, Kan.

WALNUT GROVE FARM ...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Collies, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$20,000 cash.

H. D. NUTTING, Emporia, Kans.

When writing our advertisers please mention Kansas Farmer

DIVIDEND

Dividends will commence in less than six weeks on the stock of the Uncle Sam Oil Company of Kansas. There is only about one-tenth of this valuable stock left unsold and that is being taken every hour. Money received on stock and from sales of refined oil for week ending May 6 totaled \$15,600.00, while for week ending May 12, with one good mail to hear from, was over \$17,000.00. Over one-quarter of million dollars have been subscribed for this stock at the same price asked herein of you.

Thousands are figuring on purchasing part of this stock, and record-breaking remittances are certain to follow during the next few weeks. Better send your order in early and secure some of this dividend stock before it is all sold or doubled in value.

Dividend Will Be Paid June 20, 1906.

There are few weeks left yet that you can secure stock in the Uncle Sam Oil Company, and participate in the first dividend to be paid by the company. If the stock is not all sold by June 20, it is safe to figure that it will be much higher or quickly picked up after the first dividend is paid. There are now nearly eight thousand stockholders, and they are continually increasing their holdings and inducing their friends to buy. The days are limited that you or any one will be able to secure Uncle Sam stock. Better send in your remittance while the price is right.

Why Uncle Sam Offers You a Good Deal.

It is the common talk among business men that this stock could be sold for more money. However, this company has a great work to complete and by selling the balance of the stock at even the 20 cents per share will be able to place itself where it can build, too, as large as it desires. For the past five months the stock has been selling at 20 cents per share until now close to one-quarter of a million dollars has been subscribed at that price. This money has all gone into the enterprise, and every one knows that under these conditions the stock is a good buy even at 35 cents per share. However, the company figures that by rushing the work to completion it can soon make back all that it loses on the low price of stock. Consider what the company has accomplished in the past five months and you will have to admit that you are offered a rare opportunity of investment herein. One that is commanding respect and consideration from investors from all over the United States, and one that you will have to avail yourself of at once or it will be all sold.

Remittances Are Strong.

Up to date there has been paid into this company over $\frac{1}{2}$ million dollars. Men are buying stock to-day that purchased stock on the start. Over one thousand inquiries have been received for this stock during the last few days. There

are thousands of the stockholders who will buy stock during the next ten days. There will be others who will wait too long and be too late. Remittances for the past two weeks total over thirty-two thousand dollars (\$32,000). Next week they will not run under twenty thousand and may go a half higher. The faster the remittances are received that much faster the work will be crowded. We solicit you to join our hand and help push the good work on to success.

Big River Refinery Nearly Completed.

On the banks of navigation, where it will be free from any criminal combines of the railroads and the oil trust, Uncle Sam Refinery No. 3, at Atchison, is nearing completion. The material is all on the ground, and it is just a question of days until this plant will be ready for business. Don't wait until this great revenue getter is fully completed, and then expect stock at even 50 cents per share.

First Pipe Line Pumping Station Nearly Completed.

During the last week two more of the mammoth pipe line pumps have arrived. Uncle Sam will have five large pumping stations and 135 miles of main trunk pipe line completed during the next sixty days. The first pumping plant to be built was completed this week just north of Uncle Sam Refinery No. 1 at Cherryvale. The men are now at work on another pumping station near Tyro, Kans., and will go from there to Bartlesville some time next week.

More Pipe Line Arriving Daily.

Two more car loads of pipe line were unloaded yesterday and eight miles more are on the road. Fifty miles more will be shipped during the next four weeks. It takes lots of money to complete refineries and build miles of pipe line, but when they are once completed they are the biggest money makers on earth. The quicker we can place the balance of this stock the quicker we can unload pipe line, and the company will make a special effort to raise sixty

thousand dollars for the pipe line department alone during the next fifteen days, after which this stock may be advanced to a half dollar per share.

Strikes Another Great Oilier.

As was to be expected, Uncle Sam drillers completed another fortune-maker in Eleven Hundred Acre Lot 43, Osage. At this writing the drills are lined up double-breast, following close on the trail of what oil men believe will develop the greatest oil pool of the Osage country. One of the drills is now within 48 hours' run of the pay dirt. It is going deeper every hour and is operating day and night. The oil sand has been increasing for several locations towards where the drills are now going down. Big gushers have been found in the past, and Uncle Sam may have one before another quotation is made on this stock. If you delay until a three thousand (3,000) barrel well puts this stock out of your reach it will be your fault. While you hesitate the drill may penetrate the oil pool. Uncle Sam already has a settled production in this one property of nearly five hundred (500) barrels per day. This oil, when manufactured into the different by-products will bring nearly \$5 per barrel. There is merit back of this stock on every hand, and you will make no mistake if you invest a few hundred or a thousand dollars now while the stock is certain to grow into great value.

Sixty Thousand Oil Burners Will Be Installed in Kansas by Early Fall.

For the past six months Uncle Sam men have been working on an oil burner for cook stove and heater. One that is a success has now been completed. An order has already been placed for 15,000 of these burners, and at least 60,000 of them will be installed in that many Kansas homes by early fall. This burner feeds the oil so as to generate a gas and burns the gas so that 100 gallons of oil is equal to one ton of the best coal. It looks very much like this burner would revolutionize the fuel business in Kansas and adjoining States and will open up in

time a market for domestic p. It makes Kan too valuable t force the large ing coal and w ers who are str labor. At the of the oppress larger market from all the United States.

Uncle Sam, v ing stations al cisterns at onc rounding territ rises ahead fo on this burner years has offer fuel burner—nation to give best fuel, but h ered the same, this great Uncle into existence d ucing compa being blacklist secured contr olance Uncle Sa than the most Should Build U D

It takes time thoroughly on Sam time and y refining capaci sand barrels day has reached its There is an op Sam is going to easily made in mestic fuel bus will be handled fineries. Uncle hour, and the s company advan

that must be put up with. When in good condition an earth road is a fine road—smooth, noiseless, affording good foothold to horses, but yet not too unyielding, pleasant to the eye, and comfortable to drive over. The great problem of the dirt road is that of maintaining it in this good condition, and this is largely a problem of surface and subsurface drainage. If this good earth road were to be protected from the water above and below, it would remain in good condition until it fairly wore out, like a well-built broken stone road.

It was stated at the outset that the soil in our typical county of Eastern Kansas was good for agriculture, but too clayey and too retentive of moisture to make the best natural roads. Roads in this kind of soil always need subdrainage, and by subdrainage is meant some condition either naturally or artificially created that will act promptly and certainly to lower the plane of saturation of the soil to a depth of several feet below the surface of the road. This requirement is often supplied by natural conditions, as a gravelly or sandy stratum underlying the road, or a deep, porous subsoil, or a deep ditch alongside the road. But sometimes the natural subdrainage is inadequate or entirely lacking, and the requirement must be met by artificial means. Right here is one of the weak points in the present system of road-improvement, for artificial subdrainage is seldom thought of and more seldom still employed. For the ordinary case of boggy road a single longitudinal line of four-inch or five-inch farm drain-tile laid from two to four feet under one of the side ditches, with a slight fall and free outlet, is a sure and permanent cure. Surface drainage should be provided, first, by side ditches of proper shape, size, and fall, and properly kept clean; and second, by a smooth and hard crown to be given and maintained on the road-surface. This crown should be about ten or twelve inches in height for an ordinary clay loam road, less for sandy soils, and more for gumbo; somewhat less perhaps on level roads, but more on hill slopes here.

THE USE OF THE SPLIT-LOG DRAG.

One of the features of the scheme of road-administration, which the writer

is advocating, in a system of thorough and scientific maintenance for the earth roads. The tool strongly recommended for this is the road drag, variously referred to as the King drag, the split-log drag, the Missouri drag, and the Western road drag. This tool is too well known to require a description here, but it may be stated that while it is doubtless true that there is no better form of drag than that made from a split log, in the manner advocated by Mr. King, it is also true that good drags can be made of plank. In either case a light drag is preferable to a heavy one, and the forward end of the front slab should be shod with a flat piece of steel about four feet long to serve as a cutting edge.

After a rain the first teams on a road cut up the surface more or less, and ruts tend to be formed. Now if at about this time, after the surface has dried somewhat but while it is still moist and crumbly, a drag is run over the surface, down on one side of the center and up on the other, the edges of the planks will plane off the projections and fill up the hollows. In addition, the diagonal position of the planks will force a little dirt toward the center of the road, where it will help fill up the ruts and holes and restore the impaired crown. Moreover, this smoothing action, followed by the wheels of the vehicles which now ride on the surface instead of following the ruts and cutting them deeper, on a clay or gumbo road produces in time a sort of puddled surface that is nearly impervious to water. The road then absorbs much less water and dries off much more quickly than an undragged road, is always smooth, except for the slight cutting up of the surface immediately after a rain, has the traffic somewhat uniformly distributed over its surface, always has the proper crown and a good surface to shed the next rain, and eventually develops a degree of hardness that is almost beyond belief. It is in first-class condition for probably more than ten months in the year, and in fair condition for the most of the remaining two months.

These results are certainly worth paying something for, but as a matter of fact the cost of maintaining a road with the drag is very small. The estimates usually made are from three dollars to six dollars per mile per year;

This would not be in addition to the work at present done, but would take the place of a very large part of it, so that the entire cost of maintaining the dirt roads would be decreased. The writer believes that he is conservative in estimating that by the proper and systematic use of the drag wherever possible, at least one-half of the fifteen dollars per mile per year spent for roads under the present system would be saved. For the entire county this would mean a saving of over ten thousand dollars a year, which sum could be used for such work as subdrainage, the grading down of bad hills, or other permanent improvements.

OTHER IMPROVEMENTS.

There are several other definite lines along which important improvements might well be made. One of the most notable of these relates to the use of some permanent form of culvert for the smaller waterways, instead of the common form of wood stringers with their ends resting on dry stone walls, and the whole covered with plank. Eastern Kansas is abundantly supplied with good stone, and there are several plants in the State that are manufacturing high-grade Portland cement. For most localities, good rubble masonry laid up in Portland-cement mortar will not cost over 15 cents a cubic foot, and Portland-cement concrete not over 20 cents a cubic foot. These figures are based, in the case of the stone masonry, on good, substantial random rubble work, with a mortar composed of one part cement and three parts sand; and in that of the concrete, on a mixture of one part cement, three parts sand, and six parts broken stone. An arch properly built of either of these materials is practically a permanent structure, and it may usually be shown in comparing it with the wooden culverts with dry-laid side walls that the larger first cost of the concrete or masonry arch is much more than counterbalanced by the very great saving in repairs and renewals.

Other desirable improvements, such as the subdrainage of wet places, the better looking after of highway fences, the mowing of all roadsides, the—may the writer dare suggest it?—setting out of shade-trees along the highway in places where their presence would add to the beauty or utility of the highway and would not be a source of in-

jury to adjoining property, all these and other things might be done in time if road-administration were placed on a little broader and more permanent basis.

It has been the writer's observation and experience that we have not been thinking of our roads in the right way, nor allowing to them the importance they deserve. If we took them a little more seriously, as we do our schools, we would search out the weak places and the wasteful places and the inefficient places in our present system of road-management, and remedy them. The writer is strongly of the belief that by the application of good business methods and strict scientific principles to the road question, all the improvements suggested in this paper excepting that of macadam or gravel surfacing could eventually be had at a cost not exceeding what is being spent now for the bare maintenance work.

THE PARCELS POST—CAN WE HAVE IT?

EDWIN TAYLOR, EDWARDSVILLE, KANS., BEFORE THE MISSOURI VALLEY HORTICULTURAL SOCIETY.

The answer to the above question is: Most anything can be had when people have the price and are willing to put it up.

The manner in which we are divided upon this and kindred subjects—divided according to our interests, our associations, and our predilections—is shown by a little occurrence that happened the past winter "over there in Kansas."

The Kansas Agricultural College held last year its most successful series of farmers' institutes. The especial reason of their success lay in the fact that last year, for the first time, the college employed an advance agent, director, manager, press-agent, and chaperon. For this responsible and various position, the college had the good fortune to secure the services of J. H. Miller.

Well, in all the meetings held under Mr. Miller's management, it was the published policy to eschew subjects of a controversial or political nature. But it wasn't always the case that Mr. Miller could keep the cavorting Kansans off the forbidden "grass."

For instance, at a certain town which may be called Blankville, the institute was numerously attended, with marked interest in the discourses and

Successful Oil Burner for Cook Stoves and Heaters Secured by Uncle Sam---Will revolutionize the Fuel Business of the Missouri Valley and Sound the Death Knell of the Oppressive Oil Trust

capacity of this growing enterprise will have been in great river refinery, Uncle Sam No. 2, by Atchison, Indian Territory; and sixty days longer the earnings double and will continue to increase until Uncle Sam up to 18,000 barrels daily capacity. With the bally cents per share, will place this great indenlarge from time to time to this capacity.

200,000 barrels of oil daily ses in the Missouri Valley. and Indian Territory crude great furnaces and will manufacturer to return to buyence help the poor coal miners for living prices for their time will break the grip oil trust, as it will open a crude oil than can be secured fields yet discovered in the

its score of large distribut completed, can build large storage and supply the sur There are some happy sur owners of Uncle Sam stock alone. The oil trust for place in the homes of the people the benefit of nature's always cornered and smoth never, as was to be expected, in enterprise, that was forced account of certain large pro in the Cherryvale oil district by the oppressing trust, has an invention that may ad stock to a far greater price usastic ever hoped for.

Eighteen Thousand Barrels In Two Years. any great enterprise to get feet. However, give Uncle Ill see in two years that the ll be close to eighteen thou The power of the oil trust thit and is going down hill for Uncle Sam and Uncle it. There are millions to be ng oil besides the great do that is now certain that addition to the different re will grow stronger every is bound to increase as the natural consequence. Let

reason reign, and no matter whether you live in New York, Canada, Florida, California, you can invest in Uncle Sam stock and you will get a square deal and almost certain great returns for your investment, for the company is following safe, practicable course and will continue that way.

Work Progressing on Uncle Sam Refinery No. 3.

On the banks of the Arkansas by Tulsa, in the very heart of the greatest oil field in the West, Refinery No. 3 for Uncle Sam will be completed during the next sixty days. The big boilers arrived this week. Several carloads of structural steel will be shipped the first of next week and the other shipments will follow rapidly. A large lubricating plant will be built at Tulsa, and a refined oil line built down the Arkansas River to Fort Smith, from where refined oil will be shipped by light barges to the Southern markets, after supplying all of Oklahoma, and Northern Texas and Arkansas.

Million Dollars Cash and Ten Thousand Stock-holders.

Will soon be back of Uncle Sam. With this vast strength it will be able to protect the interests of the smallest stockholders. If you have moner to invest—and most every one has—don't scare at shadows, but remember that Uncle Sam with its pipe lines and river barges completed can market oil just as economically as the trust, and considerably more so, for the public in general despise the methods of the trust and favor Uncle Sam wherever given a chance, and they will soon have the chance in every principal city in Kansas and neighboring States.

Why You Should Invest Now.

The time for any investor to secure a good deal is when the other fellow needs money. Now while Uncle Sam is raising more money than any time during the life of the company, still just at this time we need more in order to crowd the work. Just look ahead sixty days and consider what will be the condition then. Both of the last two big refineries will be completed and paid for. At least eight more large

Another great oiler was completed last week on Eleven Hundred acre Lot 43, Osage, and another Uncle Sam drill is down to-day within 48 hours' run of the pay dirt, and may develop the greatest oil pool in the Osage country. This stock is not only offered at a price that is right, but by development the assets back of it are continuously increasing.

Miles of pipe line are arriving daily. Pipe line pumping stations are being completed, and it is to crowd all this great work to final completion that this stock is offered at the present low price. By investing a few hundred dollars in Uncle Sam now you will not only help a good cause on to grander success but will secure a safe dividend investment that you will not have the opportunity to procure right away again.

producing oilers will be completed, and the 125 miles of pipe line will be completed. Thousands of oil burners will be installed. More distributing stations completed and the cash sales of oil will be close to two thousand dollars per day and all other departments of this great organization advanced accordingly. Certainly you can not afford to turn down an investment in Uncle Sam stock under these conditions, which can be proven unless you desire to insult your own pocketbook.

Write or Wire for Particulars and Pictures.

This company has just what is advertised. In the different departments, at the refinery, on the pipe line, in the oil fields and at the different distributing stations over one hundred men are crowding the great work of the company on to success. We have about eighty pictures taken from real life in the different departments showing part of the great work, also more complete reports. We will be glad to mail them to any investor in the United States or any foreign country, and any other information desired. We stand ready to prove any statement made herein and solicit your investment in this stock in good faith and will see that you get a square deal in fact as well as in words. The company will not sell over thirty thousand shares to any one man, and reserves the right to reject any offer by returning the remittance. Would rather have five men subscribe \$200 each than one man \$1,000, for this company is a common man's organization and wants as large a number of stockholders among the middle class as possible.

Price of Stock.

50 shares.....	\$ 10	2,000 shares.....	\$ 400
100 shares.....	20	3,000 shares.....	600
250 shares.....	50	4,000 shares.....	800
500 shares.....	100	5,000 shares.....	1,000
1,000 shares.....	200		

Special Offers.

10,000 shares	\$ 1,975.00
15,000 shares	2,800.00
30,000 shares	5,600.00

Monthly Payment Offer.

From the start Uncle Sam company has made it possible for men of limited means to join the company, and in addition to offering treasury stock at the above-mentioned cash price, will sell on monthly payments as follows:

Shares.	Six Monthly Payments.
50	\$ 2.00 cash
100	3.00 cash
250	7.50 cash
500	15.00 cash
1,000	30.00 cash
2,000	60.00 cash
3,000	90.00 cash
5,000	150.00 cash
15,000	400.00 cash

In Conclusion.

Charter name of this company is "The Uncle Sam Oil Company"; authorized capitalization is ten million shares; par value, \$1.00 each. The stock is non-assessable and there is no personal liability and each share of stock draws the same amount of dividends as any other share. James Ingalls is president; J. H. Ritchie, vice president, and H. H. Tucker, Jr., secretary and treasurer. These officers constitute the board of directors. References: Mr. Walker, president Atchison Savings bank (oldest state bank in Kansas), Atchison, Kan.; T. R. Clendenin, president committee of forty, Atchison, Kan.; William Stryker, editor Tulsa Democrat, Tulsa, I. T.; Montgomery County National bank, People's National bank, Cherryvale State bank, all of Cherryvale, Kan. Also Bradstreet or Dun agencies.

How to Send Money.

Make all drafts, checks or money orders payable to "The Uncle Sam Oil Company," or H. H. Tucker, Jr., secretary, and your stock will be sent promptly by return registered mail.

For further particulars, write or wire

The Uncle Sam Oil Co.
Or H. H. TUCKER, JR., SEC., CHERRYVALE, KAN.

discussions, till an uninvited individual butted in with this resolution: "Resolved. That the best interests of the farmers of America and of a great majority of the American householders, in town or country, would be much benefited by the establishment of the parcels post." Then he took the floor to exercise the constitutional prerogative of every free-born Kansan, namely, to speak in behalf of his own resolution.

He said the parcels post, in connection with the free delivery, which is now practically universal, would enable that great commercial emancipator, Montgomery Ward, to extend his counter right down to every farmer's front door, as it were; and whether the farmer wanted a pound of tea, a pair of gum boots, or a baby wagon, he could have them any or all of them, delivered to him out of one of the biggest and freshest stocks of goods in the world, with the biggest Government on earth to run the errand for him. The resultant economy for the producing classes, he said, would largely compensate for low prices for products and low wages for work. When the parcels post was once established, he (the speaker) would not be obliged to hitch up and drive four miles, through the mud, down here to Blankville and then have to pay double price to a local skinflint, whose little, measly stock of goods, as to the size of it, was in inverse proportion to the cost of it. And there was another pirate, he said, besides this Blankville merchant, that the resolution, when it was realized, would put down and out, and that was Tom Platt. He used Tom Platt's name merely in representing the express combines of the country—a combine which, by its extortions and discriminations, had forfeited the right to exist, and which, on account of its political corruptions, with a lobby in every State capitol, and a representative in every important party convention, he had come to regard as a positive menace to democratic institutions.

Tom Platt had no spokesman on the ground, but the Blankville merchant was more fortunate. His father-in-law, a neighboring farmer, was in the front row of seats, and when he struck the floor to reply it was like a voice out of a whirlwind. That "pirate," as he had been called,

in Blankville, was his son-in-law, he said; and he wasn't no pirate, neither! He just charged for his goods what he had to to make a decent living for his family. And did they want to take the bread out of his children's mouths, so to speak, by bringing him into competition at close range with millionaire concerns that would overwhelm him like a wave? His son-in-law, he said, had as good a right to live as the farmers around him, if they were fifty to one. The very friction and delay and expense attendant upon supplying individual wants, of which complaint was made, was the basis, largely, of the business prosperity that the Blankville merchant and his fellows in all other small towns enjoyed; the conditions of trade referred to were in the nature of assets of these men, in fact those conditions might almost be said to stand in the relation of vested rights. And he would never cease to denounce a Government that would use its great strength to break those little merchants up. Now, it is proposed to overthrow the rights of those men because it is convenient to the majority to have them despoiled. When did it come about, he wanted to ask, that the rights of the minority ceased to have consideration?

And as for the express company—that some people wanted to see destroyed, he would like to know who it was but that same company which gave our people a reduced rate from Blankville to Kansas City, that year we had the peach crop, and saved the Blankville fruitmen several thousand dollars (some reports said \$8,000) in that one season? Why, some people, as it looked to him, didn't know when they were well off or when they were well used, and he wanted that Institute to "set down" on all such socialistic schemes as that proposed in the resolution just introduced. And as for keeping express people and railroad people out of politics and conventions, he wanted to inquire who would be left to run the politics of the country if all men of substance and experience in large affairs were to be barred? Why, who, indeed, would be left but agitators like the preceding speaker, whose only equipment for public affairs was the possession of an iron jaw?

How Mr. Miller got his term back in the trades and under control is another story, but the instant shows the direct

tion the line-fence takes that runs down between the advocates and the opponents of the parcels post. Most country consumers want the parcels post; most country dealers want it—not!

OPPOSITION TO THE PARCELS POST.

In the city the need of it and the dread of it are both less than in the country. But it is from the cities that the great opposition comes which prevents the parcels post from coming. If there were no influences or interests involved but the direct interests, namely, country people, including those from the country towns, on the one hand, and the express companies and small retailers upon the other, the parcels post would be established before Oklahoma is admitted as a State.

The opposition that controls comes from several sources. One is that large fraction of society which is against anything that promises to disturb the existing order. They reason thus: If a part of the express business may be absorbed by the Government, why not all of it? If the Government may take over that part of our transportation commonly called express, why not go a step farther and appropriate all kinds of carriage by rail? Where is this thing going to stop? Then there is that silent, but influential class, who look with dread and distrust upon any movement tending toward greater equality among men. The parcels post would be a step toward equality. With it the poorest farmer on the rural route could buy, to the extent of his small means, just as efficiently as the richest banker, and then have his purchases delivered to him by the same power that directs the Army and the Navy. The prospect is pregnant with hope or abhorrence, according to the way you look at it.

It was a fine tribute the British Government paid to Sir Walter Scott when its proud warship bore that distinguished author through summer seas in the last months of his fatal illness in a vain quest for strength. Such attentions, hitherto, have been paid exclusively to the learned, the powerful, the rich, the valiant. But now come these iconoclasts and propose that a Government agency, more powerful and more significant than a man of war, namely, the mail service, with an industrial attachment, shall be put at the

beck and call of any Farmer Comptroller who can lick a stamp. When the father-in-law in my storyette called the parcels post a "socialistic proposition," he spoke with exactness. It is socialistic. For what is socialism, calmly considered and clearly defined, but a reversal of the procedure as old as history which has made the bee rather than the hive the center of concern, substituting therefor an effort on the part of organized society—that is the Government—to give to the public welfare that paramount consideration which hitherto has been given to private advantage?

EFFECT OF THE PARCELS POST.

Men are like horses in shying at what is new to them. Many people shy at the parcels post because it is paternalistic. The same people go right along past the public schoolhouse every day without picking up their ears and yet the public school at which all the children, regardless of property or poverty, are taught, and to the support of which all taxpayers must contribute alike, regardless of parenthood, guardianship, celibacy, or sterility, is the extremist limit of paternalism that Americans have yet incorporated into law or custom. The point is the public school, with all its leveling and socialist attributes, is accepted because we are used to it. The parcels post won't be a particle more scary when we grow accustomed to it. In my estimation there is no more question about the effect the parcels post will have upon the storekeepers of cross-roads villages and country towns than there is about the closing up of the private schools which took place when the public schools came in. When the parcels post gets into full action, the merchants I have referred to will have lots of leisure to sit on their lonesome counters and watch the Government mail-carriers drive by delivering to their quondam customers the parcels put up by Jones Bros. and Montgomery Ward.

It is only fair to say that the little dealer, wherever he may be located, is threatened with extinction by a variety of causes besides the parcels post—causes that in the main go to make up what we call "progress." The department store, the trolley car, the asphaltum pavement, the electric light, the

(Continued on page 670)

Dairy Interests**Water for Cows.**

An exchange urges very properly that inasmuch as it has been proved by actual experiment that the average cow will drink 1,600 pounds of water a month, great care should be exercised to provide her with water. That is true enough, but there are two other points that need to be also included.

1. This water should be pure. Impure water is just as hurtful to the health and vigor of a cow as it is to a human being. It produces disease just the same. It reduces the amount of milk the cow would naturally give.

Where is it impossible to have springs of pure, running water, a good substitute is a well, windmill, and tank, with a float which throws the mill out of gear when the water in the tank rises to a certain height.

2. The water should be easy of access for the cow, both in the pasture and the barnyard. With a large herd of cows, say 30 to 50, it is a good plan to have two or three watering tanks in the yard, where the cows are watered out of doors. It is worth while also to have a man remain in the yard while they are drinking, to drive the master cows away from the tanks as soon as they have drank their fill. In turning cows out to drink, it is a good plan to first turn out the underlings and the most timid ones, giving them plenty of time to get what water they want undisturbed. Lots of money can be lost with a herd of cows by being indifferent or careless on this water question.

Education vs. Ignorance.

A Kansas creamery reports that for a year just past it has paid one patron \$60 per cow for each cow milked in a herd of sixteen, and five of the number were helpers milking with first calf. To another patron it paid \$25 per cow in a herd of twenty, and to another \$17 per cow in a herd of thirteen. The latter herd is not to be considered in our remarks, for the cows were allowed to "rough it," and no man who pretends to do dairy-farming will so handle his cows. The \$25 cows were given good roughage and grain in abundance, were warmly stabled, and kindly treated. The \$60 cows were bred for the dairy, fed a balanced ration, and otherwise treated about as their \$25 neighbors. The cows of each herd were neighbors, belonging to farmers of the same community, kept on the same kind of land, and the climatic conditions were identical.

What produced the difference in the earnings of these cows? It was the difference in the owner. The feeder of the \$60 cows was a student. He studied the question of breeding a good cow, what and how to feed and how to care for her. He read a dairy paper weekly, read and filed away for future reference bulletins from agricultural colleges, and studied a book on "Feeds and Feeding," which cost him \$2. He owned and operated a Babcock test, and scales being convenient to his milk-can in the barn, the weight of each cow's milk night and morning was recorded. In payment for this exercise of brains, he received \$35 more per cow from his milk for the year than did his neighbor. A profitable dairy was the reward of his study.

The \$25 man used to laugh at his \$60 neighbor and call him a book farmer, saying that he'd see the day when he could afford to spend his time in the corn-field rather than with his cows, but that time seems farther off than ever. The \$25 man didn't believe in

studying dairy questions. He knew a cow would give plenty of milk on any kind of feed; all she required was plenty of it. He knew that it didn't pay to pump warm water for the winter drink, and he was very sure that the weighing and testing business was a humbug and unnecessary. The result is pitiful. That man received \$25 each per year from his cows in milk; it was \$5 per head more than the feed cost. He and his children worked and tugged all summer making feed for those cows, and realized a mere pittance for their trouble.

The \$25 man is grumbling—dairying don't pay. His test does not suit him and the butter-fat prices are too low. It is impossible to make that man see that the creamery is not to blame for his condition. His is a plea of dissatisfaction and so it will be ten years from this time. The milk from each of these herds was handled in the same creamery and the butter packed in the same tub. It went into the common market and sold for the same price. For one man the creamery made a living and allowed him money besides; for the other it paid little for feed and trouble, yet the fault lay not with the creamery. The \$60 man was a dairyman, the \$25 man ran a steer dairy. He wouldn't take a year's subscription to a dairy paper as a gift. He would do nothing to educate himself. The low results from his herd was his punishment for his ignorance.—Nebraska Dairyman.

Milking-Machine.

Will you please tell me through the KANSAS FARMER where I can secure the milking-machine (spoken of in the KANSAS FARMER of March 22) that was used at the National Dairy Show, also the price of the same? E. C. P.

Harper County.

A milking-machine, such as was exhibited at the National Dairy Show in Chicago, may be seen in operation at the dairy-barn of the Kansas State Agricultural College in a few weeks. This machine is expected to arrive here in a few days, and will be installed as soon as possible. The dairy-barn will have to be equipped with air-pipes and connections and the gasoline engine set up. These will be the only requirements necessary for the use of this machine in our barn, as our stalls are arranged for the machines without any further change.

C. W. MELICK.

Silo Questions.

Can you give me the size and cost of a silo that will supply four cows for a period of eight months? Also the manner of storing silage and other particulars pertaining to the silo?

Butler County. C. M. Cook.

I would advise you to build a 50-ton silo for your four cows, but if you intend to go into the dairy business it will be less expensive in proportion to the size of your herd to double the number of cows and build a 100-ton silo. We have two 100-ton silos here at the Experiment Station, which cost about \$150.00 apiece. These were made with cypress staves, using a cement foundation and bottom to the silo. The staves are dove-tailed together with iron bands around the outside to make them air-tight.

In filling a silo, corn is cut and thrown onto a low wagon, immediately hauled to the silo, run through an ensilage cutter, and carried through a tube by means of an air blast into the silo window. It is delivered into the middle of the silo and tramped around the outside while being filled, for in settling the ensilage tends to adhere to the sides of the silo which prevents packing around the periphery, while it settles perfectly air-tight in the center.

The essential feature to preserving silage is the same as that of canned products, that is, the exclusion of air. We have found corn to make the most satisfactory crop for storing in the silo, although alfalfa, soy-beans, Kafir-corn, or most other forage-crops are kept more succulent and juicy, therefore, making better feed than when in their natural state. The use of a silo means the production of more and cheaper protein per acre and succulent feed during the dry summer months and during the winter, storing the greatest amount of feed in the smallest space, and increasing the capacity of the farm. Silage is one of the most palatable feeds for the dairy cow.

C. W. MELICK.

H. G. Van Pelt Elected.

At a recent meeting of the board of trustees of the Iowa Agricultural College, Mr. H. G. Van Pelt, who graduated in 1903, was elected to the position of assistant professor of animal husbandry and superintendent of the dairy-

**DE LAVAL
CREAM SEPARATORS**

**Save \$10 to \$15 Per Cow
Every Year of Use
overall Gravity and Dilution Systems**

**And at Least \$5 Per Cow
Every Year of Use
Over all Other Cream Separators**

**While They Last
From Two To Ten Times Longer
Than any Other Machine**

Catalogue and any desired particulars to be had for the asking.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.

1218 Filbert Street,
PHILADELPHIA.

9 & 11 Drumm Street,
SAN FRANCISCO

General Offices:
74 CORTLANDT STREET,

NEW YORK.

109-113 Youville Square
MONTREAL.

75 & 77 York street,
TORONTO.

14 & 16 Princess Street
WINNIPEG.

Peerless Cream Separators**Reasons Why the PEERLESS is the Best**

1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.

3rd—Enclosed frame. Free from dust. Injury resulting from machine impossible.

4th—Perfectly noiseless.

5th—Heavy enough and strong enough to lift a box car, which insures durability.

6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to $\frac{1}{2}$ of 1-100 of an inch.

7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.

8th—at normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter-fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

**BRADLEY, ALDERSON & CO.,
Tenth and Hickory, KANSAS CITY, MO.**

Ship Your Cream Direct

Where They

PAY SPOT CASH

And Always

Protect Your Interests

No long waits for your money

No danger of losing a month's pay

See that Your Tag Reads

BLUE VALLEY CREAMERY CO

ST. JOSEPH, MISSOURI

TUBULAR Starts Fortune

If you had a gold mine would you waste half the gold? Dairies are surer than gold mines, yet farmers without Separators only half skim their milk. Tubular butter is worth 25 to 35 cents. Cream is worth one cent fed to stock. Are you wasting cream?

Sharples TUBULAR CREAM SEPARATORS**Like a Crowbar**

Tubulars are regular crowbars—get right under the trouble. Get the cream—raise the quantity of butter—start a fortune for the owner. Write for catalog U-165.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
TORONTO, CAN. CHICAGO, ILL.

farm. The college authorities consider themselves most fortunate in securing the services of so well-trained a man as Mr. Van Pelt. He is a worthy example of what hard work and a determined purpose will do for a young man. He entered the college in 1898, a poor boy. By working in the barns during the school year and on stock farms during his vacations, he earned enough money to defray all of his expenses for a complete college course.

Upon graduating, he entered the employ of Swift & Co. as salesman in their animal food department. He made good, and was rapidly advanced. In the spring of 1904 when the Jersey cattle breeders were scouring the country in search of the most competent man to be had to take charge of their cows in the famous St. Louis dairy test, Van Pelt was given the preference over all others and was induced to take up the work. In this work he won for himself an international reputation as a feeder and manager of dairy-cattle. The cattle under his charge won everything in sight. Since completing the test he has prepared for publication a comprehensive statement of the methods of feeding and management practiced in the St. Louis test, which has been very widely copied by many of the leading agricultural papers in this and other countries. During the winter of 1904 and 1905 he was instructor in animal husbandry at Purdue University, Lafayette, Ind. Since then he has been employed on the Auten Farm, at Jerseyville, Ill., and the Hartman Stock Farm, at Columbus, Ohio.

In his new position he will devote his sole time to instructional and investigation work in connection with dairy-cattle. He will be in charge of the Iowa College dairy-farm which is now being equipped with buildings and cattle. It is believed that this addition to the animal husbandry staff will materially strengthen the same.

Horticulture

The Squaw-Apple.

EDITOR KANSAS FARMER:—I wish to call the attention of the readers of your paper to a plant we have that has many valuable qualities, but the fruit of which is quite tasteless. I refer to the common squaw-apple.

It grows freely on the thin soil of our hills. It is quite hardy, and even this dry spring has an abundant crop of attractive red and green berries.

Could some of our scientifically inclined farmers experiment with this plant, as Luther Burbank has with his plants, we might by crossing it obtain rich results.

Here is a wide field for some experimenter, with a possible fortune as the result.

A SUGGESTER.

Chase County.

The Cherry.

E. F. STEPHENS, CRETÉ, NEBRASKA.

The cherry has less to contend with than the apple or plum. The tree attains nearly all of its growth during the early portion of the summer while there is an ample supply of moisture in the soil. It ripens its crop of fruit and ends summer growth before the dry periods of July and August. Hence, it is better suited to dry climates and dry soils than such varieties of trees as require a longer season for maturity. The cherry is peculiarly suited to dry soils and to the higher and drier elevations.

VARIETIES.

In Nebraska we can grow only the sour and sub-acid varieties of the Morello type. Among these the Early Richmond for early, Large Montmorency for medium, and the English

Morello for late are the three most reliable varieties. Since all of the red-juice cherries in humid climates are subject to the shot-hole fungus, it is not wise to plant the English Morello in Eastern Nebraska or in other climates where there is a large amount of moisture in the atmosphere during the summer season. The Early Richmond and Montmorency can endure a greater degree of humidity than English Morello or any other variety having red juice. This fact has led planters of Eastern Nebraska to drop out the English Morello and confine their planting mostly to the Early Richmond and to a moderate proportion of Montmorency.

The writer has found it utterly impossible to grow the sweet varieties of cherry in Nebraska, because the trees are not hardy in our climate. A sweet cherry may be made to live perhaps three to five years, but is almost invariably destroyed by the first severe winter. It is not wise to plant any of the Duke family of cherries. They are not as hardy as the Morello type and not nearly as productive.

METHODS OF PLANTING.

Since the tree does not attain large size in the farm family-orchard, the cherry may be planted sixteen feet apart each way. In town gardens where the trees are not likely to receive cultivation and therefore will not attain as large size, they are sometimes planted as closely as twelve to fourteen feet.

In planting the trees care should be taken to dig the holes at least two and a half feet across. It is also wise to dig them eighteen inches in depth. If the subsoil is of poor quality, it should be thrown to one side and in refilling the hole use surface soil of the best quality. It is admissible to use a couple of shovels full of very fine old manure. That from the cow-yard is best suited to the purpose. It is practicable to use fresh manure on the surface around the trees, allowing the rains to dissolve the application and leach it into the ground.

In planting be sure to set the tree with great solidity, tramping the earth firmly about the roots. After the tree has been solidly set and several inches of earth above the roots, it is admissible to apply two or three palls of water. After this has soaked away, finish filling the hole, leaving the surface loose.

PRUNING THE TREES.

After the trees have been planted, they should be pruned the same day. In forming the head of the tree it should be remembered that the cherry suffers more from bad methods than any other tree. The head should be left as close to the ground as possible. Do not cut away any of the lower branches. It is wise to shorten all of the limbs, trimming in such form that each branch will have three or four good, strong buds remaining. The central shoot should not be shortened as much as the others, since this should be allowed to make an upright, vigorous growth and help form a symmetrical head.

It is well to bear in mind that if the side branches are removed and the trunk of the tree exposed to the full force of the winter's sun, the tree will suffer from sun scald. The bark on the south side of the tree would be killed. The cherry-tree should be headed within eighteen to twenty-four inches of the ground. In its after care the cherry requires less pruning than other fruit. Simply remove the cross branches that tend to crowd or rub each other. The removal of large branches from the cherry-tree should be avoided.

CULTIVATION.

If planted in a climate where there is not always an ample supply of moisture, it is better not to grow any crop among the cherry-trees; rather conserve all possible moisture. Where trees receive suitable care and culture, they should the first season make a growth of eighteen to thirty inches.

The tree should commence bearing when three or four years planted, and when five or six years of age should be yielding a very fair crop of fruit. At the age of nine years from planting, the writer has picked more than a hundred quarts from a single tree.

When the trees are too large to cultivate both ways, the writer has found it to be decidedly advantageous to mulch the row one way with stable litter or straw manure and continue to cultivate between the rows. Should the planter mulch the entire area of the orchard, it would have a tendency to bring the feeding roots to the surface. Cultivation one way compels a considerable portion of the feeding

FREE TO YOU OMEGA SEPARATOR

New book telling how to get more milk money; how to care for cream; how to make butter and a hundred other things. Free if you mention this paper and give name of neighbor who keeps cows.



produces better cream, is more easily turned and more easily washed than any other. We let you prove it on your own farm before you buy. Send for catalogue and Free Trial offer.

The Omega Separator Co.,
23 Concord Street, Lansing, Mich. or
Dept. F Minneapolis, Minnesota.

FREE BOOK ABOUT U.S. CREAM SEPARATOR

Tells plainly the "WHY" of it. Shows

WHY the U. S. Skims Cleanest

WHY the U. S. Holds the World's Record

WHY the U. S. Wears the Longest

WHY the U. S. Is Simple in Construction

WHY the U. S. Is Easy Running

WHY the U. S. Is Easy to Clean, Easy to Handle

and Perfectly Safe to Operate

48 pages of well-printed, easy reading, finely illustrated facts for the farmer who wants to make his cows pay the biggest profit.

One cent brings you new Catalogue No. 91. Write the postal today.

VERMONT FARM MACHINE CO.

Bellows Falls, Vt.

Eighteen centrally located distributing warehouses throughout the U. S. and Canada. Prompt delivery.

435

Cleveland Cream Separator

Direct to you
30 Days Test

Cleveland

You want an easy running separator and the Cleveland is the only all ball-bearing separator made.

You want an easy cleaning separator and the Cleveland is the first separator and the only one that uses aluminum in its slimming device. The only metal that milk will not stick to. No coating to wear off. Non-corrosive, non-poisonous. The metal recommended by scientists for cooking utensils.

You want a long lived separator and the Cleveland has the fewest parts of any separator made and gets results at slowest speed. Fewer parts, less wear, less repairs. The Cleveland is a guaranteed perfect skimmer.

You want to save money and the Cleveland is the only all-grade separator that is sold at a reasonable price. And it will let you prove that for yourself before you invest a cent by trying a Cleveland on your own farm. No money in advance. Our catalog tells you how to get a Cleveland and save money. Write for it.

THE CLEVELAND CREAM SEPARATOR CO.
Dept. D, 34 Michigan Ave., N. W., Cleveland, Ohio.

well as by the wind, so that the same flood which makes the sand-bar often seeds it with the tree which will redeem it. In heavier soils other shrubs, such as the smooth sumac, the wolfberry, and the wild plum, which grow in clumps and are able to win in the fight against grass, are forerunners of the forest.

The one thing which, above all others, makes for improved conditions on the plains, and gives assured hope for better tree-growth in the future than in the past, is the cessation of fires. Before the country was settled, fires were both frequent and extensive. Only the trees along streams could survive, and, at best, make a stunted, scrubby growth. Reproduction was extremely uncertain, owing to the loss of seedlings, and grass gained the ascendancy over all other forms of vegetation. But with the nearly complete stoppage of fires since the country has been permanently settled, conditions are greatly improved. Several tree species have succeeded, despite other most adverse circumstances, in forcing their way into the very heart of the plains by following up the water courses tributary to the Missouri River. It is, therefore, quite certain that with protection they will in the future steadily gain new territory.

As a result of the study, it becomes clear that the forests of this region are much more restricted in area and poorer in character than they need be. That it takes a long time to grow trees fit for any practical purpose is true, yet a region without trees is seriously handicapped, and few farmers can do better for their property than to establish groves upon it. The Government is so well convinced of the practicability of growing trees from seed in this region that it has created two forest reserves, containing 208,000 acres, in the sand-hills of Nebraska for this purpose.

The tables contained in the bulletin make it possible to learn how land now given over to stock can be made, in a comparatively few years, to produce a stand of trees whose value will exceed the accumulated rents as pasture.

The bulletin closes with an account of the tree species found in Western Kansas and Nebraska.

MAKE EVERY DAY COUNT

no matter how bad the weather.

You cannot afford to be without a TOWER'S WATERPROOF OILED SUIT OR SLICKER

When you buy look for the SIGN OF THE FISH

TOWER'S
WATERPROOF
OILED SUIT
OR SLICKER

A. J. TOWER CO. BOSTON, U. S. A.
TOWER CANADIAN CO. LTD. TORONTO, CAN.

PLYMOUTH ROCKS

BARRED PLYMOUTH ROCK EGGS—From free range stock, no other fowls kept on the farm. Price \$1 for 15; \$5 for 100. Mrs. C. F. Brown, Box 61, Manchester, Oklahoma.

BLUE BIRDS—Barred to the skin. Hawkins Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kansas.

BARRED PLYMOUTH ROCKS—Large pure-bred good laying strain. Male, weight 11 to 13 pounds. Have free range. Fresh eggs packed carefully; \$1 per 30; \$1.45 per 45. Emma Rauer, Beatrice, Kans.

EGGS FOR SALE—Buff Rocks, exclusively farm range; 50 cents per 15; \$3 per 100. Mrs. W. Lovelace, Muscotah, Kans.

BARRED PLYMOUTH ROCKS—Bradley strain prize winners; won 1st on ckl. last three years at Harvey county poultry show. Eggs from per \$2, June \$1 per 15. R. Harmston, R. R. 6, Newton, Kan.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds. \$1.50 per 15; \$2 per 30. Incubator eggs, \$5.00 per 100. M. B. Turkey eggs, \$3.00 per 11. J. C. Bostwick, Route 2, Hoyt, Kansas.

WHITE PLYMOUTH ROCK exclusively—Eggs for hatching from a pen of fine birds. Satisfaction guaranteed. J. A. Kaufman, Abilene, Kans.

EGGS FROM MAMMOTH BARRED PLYMOUTH ROCK CHICKENS \$1.50 per 15. A. D. Wyncoop, Benden, Kans.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Colle pups. W. B. Williams, Stella, Neb.

FOR SALE—After May 1, best Barred Rock eggs in State for \$1 for 15; \$5 for 100. A. C. Rait, Junction City, Kans.

Barred Plymouth Rocks

Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

BUFF ROCK EGGS

Here they are. Good ones. Fifteen for \$1; 45 for \$2.50; 100 for \$5. Orders filled in rotation as received. Eggs ready now. H. M. Stephens, Munden, Republic County, Kans.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants. : : : : :

A. H. DUFF,

Larned, : : : : Kansas

White Plymouth Rocks

EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at W. P. Rocks hold the record for egg-laying over every other variety of fowl; eight pullets averaging 239 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 98%, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B., Topeka, Kans.

WYANDOTTES

FOR SALE—White Wyandottes, one pen high scoring; also eggs \$1 per 15. A. R. Gage, Minneapolis, Kans.

WHITE WYANDOTTE COCKERELS, (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Artz, Larned, Kans.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore Eureka, Kans.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 98%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

PURE BRED White Wyandotte eggs for sale \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

EGGS, EGGS—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting, Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White, Buff and brown Leghorns, White, Buff and Silver-Laced Wyandottes, Game, Golden Sea-bright Bantams, Pearl and White guineas, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

FOR SALE—Golden Wyandotte eggs, from the best 'pen; \$1.50 per 15. E. Davis, 910 Madison, St., Topeka, Kans.

HIGH CLASS POULTRY Silver Wyandotte, White Wyandotte and White Plymouth Rock Eggs for hatching, \$1 for 15. R. F. Meek, Hutchinson, Kans.

SILVER LACED AND WHITE WYANDOTTES \$1 per sitting of 15. Eggs guaranteed. Circular free. R. C. Macaulay, Route 1, Frederick, Kans.

White Wyandottes Exclusively

Pen 1 headed by 1st prize cockerel. Topeka; hens scoring 93%; eggs, \$2 per 15. Pen 2, cockerel scoring 93%; hens, 92 to 94%; eggs, \$1 for 15. All stock for sale after June 1. F. H. Sutton, Minneapolis, Kans.

S. L. Wyandottes

Indian Runner ducks. Our Wyandottes have been line bred for 20 years and never fail in any company. Our yards are headed by Silver Prince, the 1st cock at the Kansas State Show, and three of his cockerels. Stock for sale. Eggs, \$2 per sitting. Incubator eggs, \$5 per hundred. Duck eggs, \$1.50 per sitting.

M. B. CALDWELL, Broughton, Kansas

The Poultry Yard

Conducted by Thomas Owen.

Indian Runner Ducks.

Can you or any of your readers tell me anything in regard to Indian Runner, or leghorn' ducks, their size, laying qualities, rapidity of growth, immunity from disease, and vermin?

Where could pure-bred eggs be obtained? Have read they were great layers, but thought it might be an advertising scheme. S. FRANCIS. Osborne County.

ANSWER.—There are several breeders of Indian Runner ducks in this State, and some of them advertise them in the KANSAS FARMER. O. C. Sechrist, Meriden, Kansas, breeds them extensively and is a reliable gentleman to deal with. He had them on exhibition at the State Show, taking all the premiums. A noted poultry writer has this to say of them: "The best laying ducks undoubtedly are Indian Runners. The eggs from them are not so large as from the Pekin duck nor do they make such good table fowls, but where eggs are the object they are very profitable, being hardy both as ducklings and adults, and good winter layers. Their usual weight, though they are not very large, is about 4 pounds and they are fine in bone, usually have a good heart, and are of most delicious flavor. They do well on soft, marshy ground whenever they can have a free run, but in confinement they would be quite uneasy and uncomfortable. They are non-sitters and rarely if ever become broody." Writing on this breed, Matthew Hunter says: I can with confidence state that they are the ducks to supply the table with eggs, and to those who prefer duck's eggs to hen's eggs, they come as a boon, as they can almost be relied on all the year round, hence, one need never despair of not being able to have ducklings when others can scarcely get eggs. I consider them the most profitable breed to keep, as they will pick up almost all the food they require, returning for a little supper and bed, which saves much time in duck hunting. As to a morning meal they never look for any and can not be persuaded to stop and have it, preferring to find their own. They are not particularly fond of water, beyond a bath and drink, and their sole aim seems to be to roam about the fields in search of insects or animal food. They will pay well to cross with other breeds, to improve laying and early maturity for the table. They lay a large egg for the size of the duck, averaging about five to the pound, and are, in my opinion, the most profitable utility breed of ducks that can be kept." The color of the breed varies, but their points may be put down as follows: Head and neck, fine and long; beak yellow, bordering on green; duck that of leaden green; markings lustrous green; black on top of head and on each side of cheeks, going past the eye V shaped; in the duck it is dark brown, almost black; color, nice fawn breast and back, running much darker on duck by the aid of markings; wings white, when crossed, gives them the effect of saddles on the back; style and carriage upright, lively, and alert, better when startled; movement a perfect run, without the waddle; head carried very high. The origin of this variety of duck appears to be almost unknown, though we believe the first consignment was brought to this country by a sea captain from India.

Overfeeding Chickens.

I would like to know if you or any of the readers of your valuable paper can tell me what ails my chickens and what to do for them. They have been sick for about a month. Out of a flock of 175 I have lost about two dozen. Some of them die suddenly and some linger along for a couple of weeks. They first took with a dysentery and the droppings were either quite green or tinged with yellow. I do not see much of that color any more, but the droppings are quite thin and even sometimes watery yet. From the appearance under the roosts the whole flock must be affected, and yet the most of them look fine with red combs and voracious appetites. They lay well, but I notice every morning several eggs in all stages of immaturity under the roosts, indicating a weakness. Just before they became sick they were caught in a sudden rain storm and became drenched to the skin. Have been feeding them a soft feed in the morning and whole corn at night. Lately I have been taking

nearly all grain from them; letting them get what they can on the range, but they do not get enough that way to satisfy them. Have been giving copperas in the drinking water. Am now trying kerosene. Have also given condition powders. Will some one please advise me? The disease seems to me peculiar in that it hangs on so long, yet is not very fatal, although none that have been very sick have recovered. I remove all droppings at once. MRS. T. H. IRWIN.

Saline County.

ANSWER.—Your chickens are probably too fat, and it would be well to feed sparingly for a while. Feed no mash at all, but if you have lots of skim-milk, boil that and let them have all they will drink of it. When you feed grain see that none of it falls among the droppings of the fowls, as that is generally the way that disease spreads among a flock. The drenching in the cold rain storm probably started the trouble.

Birds That Pay.

Some hens are not worth their keep. Others produce enough to cover the cost of their handling. The hens that pay are those that more than meet the expense of money and time necessary to make them worth while. Here are three classes of hens, and the last is the one that we can have if willing to pay the cost.

What is necessary to own birds that pay? It takes more than money to do this. You can buy birds that can pay, but it is another thing to have them pay you after you own them. Not only must you have the right kind of hen, but you must use time and thought in caring for her to make her of the "paying kind." This kind is usually hatched from a paying strain. The paying hen that comes out of a flock of good-for-nothing birds is seldom met and is not worth hunting for. It takes time, it takes money, it takes born hen-sense, to produce a flock of paying hens. It takes a very little neglect to send this flock back to the class of non-paying birds.

Paying birds are a delight to the eye. You like to show them to your friends, and linger in your description of what they are and what they have done for you. This class of birds—because they pay—receive thought and attention from you. You gladly take good care of them; you are willing to properly mate and feed them; you look for fresh blood to improve your flock. They never make up a large part of your flock when you sell the cream of the chicks every year. Money-making flocks are made up of the best you raise, always letting the second quality go to market.

Paying birds live in houses free from vermin and supplied with pure air and water. They get food that is needed to bring the profit to the produce point. Cheap food, because it is cheap, never helped to produce the paying hen and keep her running to the nest. Hens that pay can be yours if you are willing to do your part. Hens that more than pay, that bring splendid profits, are what the world is asking for, is looking for, is demanding. Are you going to be among the breeders who fill the orders for this kind of bird?—Mrs. B. F. Wilcox, in Northwestern Agriculturist.

Chicken Talk.

Many of us in Kansas and surrounding territory have a good thing, and one that is cheap, right at home. I refer to crude oil. The writer is using it for the second season. Last year I used it freely about the roosts and hen-houses with good results. This year I am using it in coops and boxes for sitting hens. I use it sparingly on the inside of the nest boxes, but paint the bottom freely with it. I also use lice powder on hens and in the nest about once a week. One method or both has kept vermin away, and I have had good hatchings. In several instances every egg has hatched, and with two or three exceptions every fertile egg. In fact, my hens have averaged better than my incubator this season and have not caused much more trouble, as I find Plymouth Rocks good sitters and mothers.

To make a cheap coop with little trouble, take a coffee box or one of about that size. Take an inch board the length of the end of the box and 6 or 8 inches wide, saw it from corner to corner and with cleats nail it on top of the ends of the box. This will give the shape for the roof. Take narrow pieces of tin and with small lath nails, nail on in front, leaving spaces for lath to slip in. Make a little door. A single board will often do with cleats on, and with leather hinges

LANGSHANS

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

BLACK LANGSHANS—Hens scoring 98 and upward—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for 30; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF LANGSHANS

 \$4.00 per 12 eggs. White \$2, Black \$2, \$1 and \$5 per 100; Buff Leghorns, Orpingtons, Cochins, S. & D. C. B. and White Leghorns, B. and W. Rocks, W. and S. L. Wyandottes, L. Brahmas, \$1.50 to \$2.00 per 15. Toulouse Geese eggs 20c each. M. B. turkeys, \$1.50 and \$2 per 9.

Imported and native high-scoring blood in our yards. America's Central Poultry Plant. J. A. Lovette Mullinville, Kans.

LEGHORNS

ROSE COMB BROWN LEGHORN EGGS, 15 for \$1, 50 for \$2.50, 100 for \$4. Mrs. John Holzhey, Benden, Kans.

BUFF LEGHORNS AND BUFF ORPINGTONS. Catalogue free. W. H. Maxwell, 1240 Quincy St., Topeka, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1908 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 First street, Newton, Kansas.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 8. Emdegeese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hintley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

Pure Single Comb Brown Leghorn Eggs—30 for \$1; 100 for \$3. F. P. Flower, Wakefield, Kans.

Buff Leghorns

S. C. Eggs, 30 for \$1.25, 100 for \$3. John A. Reed, Route 2, Wakefield, Kans.

Johnnie Chase, Glasco, Kas.

Breeds Black Minorcas, S. C. Brown Leghorns and Barred Rocks. Second to none in the state. Eggs, \$2 per sitting.

PRIZE-WINNING S. C. BROWN LEGHORNS

Exclusively. (Short's strain.) Farm stock eggs from pen scoring 198. \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty.

MRS. W. O. MAGATAGEN, BEATTIE, KANS.

Mention 'KANSAS FARMER' when writing.

Rose Comb Brown Leghorns EXCLUSIVELY

Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots.

P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READING, KAN.

Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers.

MRS. IDA STANDIFERD, "Up-To-Date" Farm

Rose and Single Comb White Leghorns and White Wyandottes

IN ALL THEIR PURITY Unsurpassed in every respect for beauty, utility as winter layers. At State show, the largest in the U. S., just held at Topeka Kansas, 26 prizes were awarded me. Write for my catalog, giving prices on stock and eggs.

W. S. YOUNG, McPherson, Kansas When writing mention this paper.

BUFF COCHINS

BUFF COCHIN EGGS—From high scoring prize-winning stock, \$1.25 per 15; \$5 per 100. Stock for sale. A. R. Gage, Minneapolis, Kans.

MAMMOTH BRONZE TURKEYS

EGGS FOR HATCHING from large high-scoring M. B. turkeys, \$2 per 9; S. C. and R. S. Brown and S. C. White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas. Prize-winners in every pen. Eggs, \$1 per 15. Virg. Bailey, Kinsley, Kans.

Eggs for Hatching

M. B. turkeys, \$2 per 10. Golden Wyandottes, \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

Eggs For Hatching

WHITE HOLLAND TURKEYS, MAMMOTH, PEKIN DUCKS AND BARRED PLYMOUTH ROCKS, \$1 per setting for any of the above, fresh eggs carefully packed and safe arrival guaranteed. A. F. Huse, Manhattan, Kans.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR, Glendale Park, Hutchinson, Kans.

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa, hemp, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Old Weiss Alfalfa Stock Feed Co.

Wichita, - - - - - Kansas

BRAHMAS

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 Brats this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Wenver. - Blue Mound, Kansas

Light Brahma Chickens

Chicks pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

GEES

BROWN CHINA GEESE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show.

O. C. Sechrist, Meriden, Kansas.

SILVER SPANGLED HAMBURGS.

MY SILVER SPANGLED HAMBURGS led their class at the last three State Shows; also have World's Fair Premium. Eggs \$1.25 to \$2.00. Mrs. Fay Finkle, Galva, Kans.

INDIAN RUNNER DUCKS.

Indian Runner Ducks and White Wyandottes Eggs

Fresh, fertile and from high-class stock. Price reduced to \$1 per sitting. L. D. Arnold, Enterprise, Kans.

INDIAN GAMES

Cornish Indian Game Eggs.

Write L. C. Horst, Newton, Kansas.

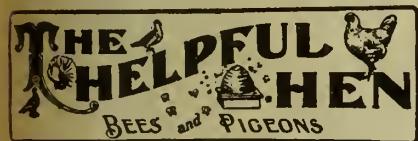
RHODE ISLAND REDS

RHODE ISLAND REDS EXCLUSIVELY—Cockerels \$1. Eggs, sitting \$1.50; for incubators \$5 per 100. Address Ben Warren, Maple Hill, Kans.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

IN ALL THEIR BRILLIANTY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kansas.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Keller, "Vinewood Farm," Mound City, Kans.



Subscription, 25 Cents a Year.

"OUT THERE IN KANSAS"

All about the chicken industry in Kansas, the bees and pigeons. Full of information illustrated and made plain for the people. Practical, by and for practical people. The paper that reaches the chicken folks. If you are interested in poultry, bees or pigeons, THE HEN will interest you. Address THE HELPFUL HEN, Topeka, Kansas.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

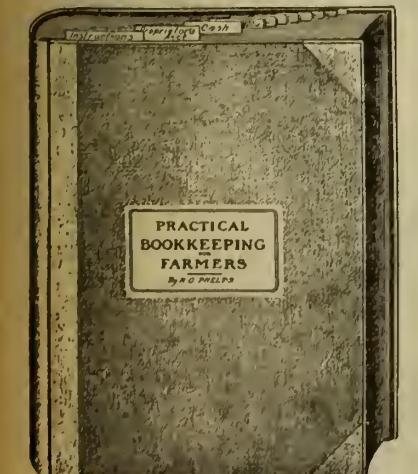
Topeka Supply House

7th and Quincy, Topeka, Kansas



More than your money's worth in incubators during the summer. We have them all beat; \$4, \$6 or \$9 days to prove it. 5 year Guarantee.

Now is the time to write to M. M. JOHNSON, the Incubator Man, Clay Center, Neb.



The farmer's guide to success in farming. A book for actual use in keeping all farm accounts in. A full set of farm and live stock accounts worked out in detail. Any farmer can use it. Every farmer, who wants to keep track of his business, should have one of these books. Price delivered.....\$3.00
Kansas Farmer, one year.....1.00

Total.....\$4.00
Both for.....\$2.50

Address
KANSAS FARMER CO., Topeka, Kans.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
418 Kansas Avenue, Topeka, Kansas

fusen to the front to let down at night. If you want a bottom in the coop, nail cleats on and make the floor to slip in. I always want floors removable, and do not use them unless the ground is wet or there is danger from rats. The above is little more trouble to fix than a common box, and you have a convenient coop with a good roof. I have a number of larger and heavier coops made much on the same plan, but find these light and handy and quickly made. If the good man is too busy, get the boys to make up several or the woman can make them herself. I paint these coops over with crude oil which preserves them and is a hint to lice and mites that they are not wanted. I do not use much oil inside excepting on the floor and I cover that over with about an inch of fine soil.

When many chicks are raised, I find the brooders take less work, but I use both methods and, unless one is well fixed with brooder-houses, think perhaps one method is as good as the other.

D. S. THOMPSON.
Anderson County.

Poultry Notes.

The profit from poultry depends largely upon economical feeding from utilizing materials which would otherwise be wasted. When grain must be purchased to supply their needs, close figuring is necessary if a fair profit is realized.

Linseed-meal is highly nitrogenous and is excellent as an egg-producing food, and if given when the eggs are well supplied with grass or other bulky food, is excellent. If too much is given, however, it will make the hens too fat. A teaspoonful to each hen three times a week is sufficient.

A small box of charcoal kept where the hens can have access to it will serve to arrest disorders of the bowels from overfeeding. The charcoal should be broken to small sizes so that the fowls can swallow it readily, and should be freshly burned. There is no danger of their eating too much.

Too many of those who go into poultry to make a specialty of eggs are too ready to overrate the importance of the breed and underrate the value of proper food and shelter. High prices are paid for pure-bred fowls and then no care is given them and in a short time they are ready to declare there is no money in them.

One object in keeping poultry is to use it as an agent for converting some cheap article into another that is more salable. As a rule there is no necessity for growing food especially for poultry, when it can be procured so low as to permit of utilizing the land for the growth of something better.

The practice of discarding the hens and keeping the pullets may be carried too far and result in a degeneracy of the stock. This may not be noted at once, as it will not be a rapid process, but after a time lack of vigor and vitality will be discernable. Keep a sufficient number of well-matured, vigorous hens to supply the eggs needed for hatching.

One of the best means of removing lice from fowls is to make them do it themselves by having a lot of dry earth where they can dust themselves whenever they feel like it. Sprinkle the earth with diluted carbolic acid. This acid proves too much for the lice and they leave the premises at once, or it causes them to give up the ghost.

One great source of unfertilized eggs is due to the fact that too many females are yarded with one cock. His vitality is exhausted, only a limited number of eggs hatch, the chicks are debilitated, and not a few are so weak that they can not break the shell, and die without being hatched.

The guinea fowl is one of the best foragers known on the farm. It industriously seeks its food without scratching and not only eats the seeds of noxious weeds and unpalatable grass, but its quick movements enable it to be very successful in destroying winged insects. A flock of guinea fowls will do very effective service in this direction and are also attractive and pretty fowls, even though they are noisy at times.

\$18.00 to New Haven, Conn., and return.

Plus \$1 from Chicago, via Nickel Plate Road, June 2, 3, 4, and 5; also via New York City at excursion rates. Return limit June 30, by arranging for extension. Nickel Plate office, Room 298, 113 Adams St., Chicago. (6)

Biennial Meeting General Federation of Women's Clubs at St. Paul, May 30-June 7.

The Chicago Great Western Railway will on May 28 to 31 inclusive, sell tickets to St. Paul at one fare plus \$2 good to return June 9 with the extension privileges. For further information apply to any Great Western agent or J. P. Elmer, G. P. A., St. Paul, Minn.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed.

News from Kansas Grangers is especially solicited.

NATIONAL GRANGE.

Master.....N. J. Bachelder, Concord, N. H.
Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary.....C. M. Freeman, Tippecanoe City, Ohio

KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan Overseer.....A. P. Reardon, McLouth Lecturer.....O. H. Hibner, Olathe Stewart.....R. C. Post, Spring Hill Assistant Stewart.....Frank Wizwell Ochiltree Chaplain.....Mrs. M. J. Ramage, Arkansas City Treasurer.....Wm. Henry, Olathe Secretary.....George Black, Olathe Gatekeeper.....J. H. Smith, Lone Elm Ceres.....Mrs. M. L. Allison, Lyndon Pomona.....Mrs. S. M. Phinney, McLouth Flora.....Mrs. S. J. Lovett, Larned L. A. S.....Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman.....Topeka, Station A E. W. Westgate.....Manhattan George Black, Secretary.....Olathe Henry Rhodes.....Gardner J. C. Lovett.....Bucyrus

STATE ORGANIZER.

W. B. Obryhim.....Overbrook

The Simple Life and How to Live It.
READ BY MRS. MARY M'DONALD, BEFORE MANHATTAN GRANGE.

The simple life, I find, is not a very simple subject to treat. I suppose because it is something we have never thought much about. We never think about it, because all our thoughts are absorbed on what we suppose are our needs. Anyway we are almost wholly absorbed in the gratification of our desires; or in trying to overcome the many obstacles to the attainment of our desires. We do not discriminate between our desires and our real needs. But as individual tastes differ, so will each person have his own ideas as to what constitutes the simple life. Our idea is this: The simple life has for its basis simple thought; and simple thought is thought evolved from our inner consciousness, is home thought; thought that is not borrowed.

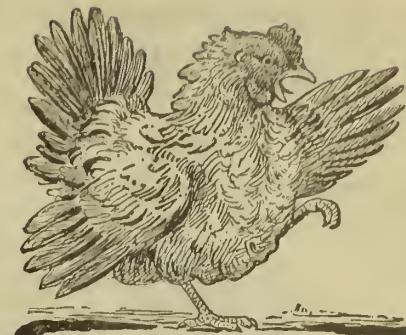
In this day of many books, when the floods of cheap literature throng our desks, it is hard to know whether we are voicing our own thoughts or the thoughts of some one else. But let us not underestimate our great advantages over past ages of the world. We can take what is most congenial to our tastes and leave the rest out. And if we make proper use of the means within our reach, we will find much help in the attainment of a simpler and less complex form of life than we have yet attained. To know a thing we must study it. Study it from our own point of view. Each and every individual should be master of the situation for himself. Each can simplify his or her own life according to his or her desires or needs.

The real remedy is to give the subject our earnest thought, and the means fitted to each case will not be found wanting. No hard and fast rules can be laid down to simplify life. Each must be his or her own judge. But it is well to discuss the subject, for it is a most important one. In this day of hurry and rush, this day of competition in all lines of business, of arduous labors, and many cares, we are overlooking a subject that is of real interest to us all.

In order to get the clearest idea of the simple life, we must go back to primitive man, when, according to the information we have on the subject, our race lived in tents; lived, of course, in the most simple manner imaginable in all the details of their lives, and it seems that this simple life was considered by the wise and experienced ones as the better way; indeed as the only way to attain the higher or spiritual life. As in one instance, at least, they were commanded to build no houses and to plant no vineyards or to sow no seed.

Each age has its own work to do; each age has its improvements and is in advance of the last. This age is the age of work. We work more than ever before, but we do not always work wisely, for we cumber ourselves with much that is unnecessary; much that we soon tire of and wish we had not taken so much pains to acquire. Our time thus spent is a waste to ourselves and no good to any one.

The trouble is that our tastes are exaggerated; our imagination distorted; our thoughts are given a loose reign and lead us a pretty chase. We should train our thoughts and prune our desires to meet the simple demands of nature. We have heard people say that they could not help their thoughts, but we must or we will never attain the new, the true, the



A Crazy Hen

eaten alive with lice can't lay eggs, and is a most wretchedly unprofitable bird. Instant Louse Killer in the nests, on the roosts and in the dusting places will work wonders in restoring peace and harmony. The egg basket will show better and the flock will do better in every way.

Instant
Louse Killer

(Powder or Liquid)

costs little to use and does much. It kills lice on stock and ticks on sheep. It destroys bugs on cucumber, squash and melon vines, cabbage worms, slugs on rose bushes; is harmless when applied to eatable plants. Instant Louse killer put up in round cans with perforated top. Besure of the word "Instant." See that it is on the can—there are over 25 imitations.

1 lb. 25c. { Except in Canada
3 lbs. 60c. { and extreme
West and South.

If your dealer cannot supply you we will forward 1 lb. by mail or express, prepaid for 35c. Sold on a written guarantee.

DR. HESS & CLARK,
Ashland, Ohio.

\$16.00 AN ACRE

in Western
Canada

is the amount many farmers will realize from their wheat crop this year.

25 Bushels to the Acre
will be the
Average Yield of Wheat

The land that this was grown on cost many of the farmers absolutely nothing, while those who wish to add to the 160 acres the Government grants, can buy land adjoining at from \$6 to \$10 an acre.

Climate splendid, schools and churches convenient, railways close at hand, taxes low.

Send for pamphlet "20th Century Canada" and full particulars regarding etc., to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent.

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.

This Keeps
Lightning
Out Of
Telephones

This picture shows our "No Risk" Lightning Arrester. Pull the knob and your telephone is also safely cut out. The lightning cannot enter your house.

Simple of course. But positively safe because so simple. Pulling the knob connects the telephone with ground-wire—leaves line wire free and clear—just switches the current.

The knob pulled before a storm saves the phone, protects the house same as a lightning rod, avoids fire, insures safety for the family. Book About It FREE!

Our book sent to anyone free. Just send your name and address. It explains everything tells how you can try the "No Risk" Lightning Arrester FREE, etc. Or send us \$2 and get the complete arrester. Fully guaranteed to work and protect no say or money back. Reliable Agents wanted. One man sold 15 one day. Another 35 in 6 days.

W. E. ASHBY TELEPHONE CUT OFF CO.
111 Square Street, Charlton, Iowa.

ANYONE WISHING—
UNITARIAN SERMONS and
PUBLICATIONS SENT FREE, may address Mrs. F. O. Leland,
Concord, Mass.

More Money Made as Local Agent

FOR FARMERS FIVE
YEAR ACCOUNT-BOOKS

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N. Y.

THE KANSAS FARMER

BLACK DIAMOND
Ready Roofing**17 Years
of
Satisfaction**

That was Black Diamond's record on the building of the Davis Bros. Manufacturing Co. at Milwaukee. And it is the kind of service it always gives.

Black Diamond is the oldest and best ready roofing on the market.

For over thirty years it has been giving solid satisfaction.

Send for free Sample and Booklet showing buildings of all kinds covered with this famous roofing. Address nearest office.

BARRETT MANUFACTURING CO.
New York Chicago Philadelphia St. Louis
New Orleans Cincinnati Kansas City
Cleveland Minneapolis Allegheny

higher, simple life. In the life that is honestly and really simple, just common sense is all that is required. Life ordered according to common sense is not to have more possessions, not to desire more than one mind can comprehend at a glance. Anything that adds to mental confusion is not simple, is not natural, and therefore not necessary. Great material possessions bring confusion, distortion, lack of harmony, and undue desire for such things, and rob the mind of its highest, noblest aspirations.

Our age of the world is a peculiar one. Never before was there such a mad rush for material things. It seems that every one is striving to gain the whole world, even if he should lose his own soul. Time was when only kings and princes could live in luxury. The common people did not aspire to a life so seemingly unattainable. American freedom and equality have set the world on fire. The highest gifts of life belong not alone to royalty, but all from the highest to the lowest are free to compete for the prize. What wonder then that all join in the mad chase. What wonder that the world has overstepped the bounds of reason and that extravagance and vulgar show take the place of common sense. Too quickly have the leaders in this mad chase, those who have obtained wealth by their wits, emerged from indigence to affluence. They were not prepared for the sudden change. Simple, natural taste is thus demoralized. Imitation has taken the place of the real. Time was when it was considered a disgrace to work. But now that the shame is taken away, a new danger threatens us. We are taking upon ourselves too much. We have not learned to regulate our lives according to our strength. We have passed from simple to complex at a bound, and are altogether unprepared to appreciate our position. Our ancestors were wise, but their lives were simple. We have sought knowledge rather than wisdom, and have invented many things to lessen labor or to enable us to do our work more easily. But lacking in wisdom, we have let our wants go far ahead of our needs. Knowledge is from without while wisdom is from within. It behoves us to inquire within and heed the voice of reason. To curb our desires and train our thoughts to the simple natural needs of life which brings only peace, hope, happiness. We trust that the next step in the advancement of the human race will be a return to primitive simplicity, embellished by the intelligence acquired in the intervening ages.

The Shawnee County Fruit- and Truck-Growers' Association has been formed. A central market will be established at Topeka to handle the products of the members. The officers of the association are: B. F. Van Orsdal, president; O. F. Whitney, secretary; A. B. Smith, J. M. Kennedy, and W. J. Kearney, trustees.

Cheap Rates

To New Haven, Conn., from Chicago direct and via New York City, June 2, 3, 4, and 5. Extended return limit June 30. Write Nickel Plate Road, Room 298, 113 Adams St., Chicago, for particulars.

The Parcels Post—Can We Have It?
(Continued from page 565.)

telephone, the auto delivery wagon, all are unfavorable to small businesses. By merely taking up a little stick of black rubber with a diaphragm in one end and a wire at the other the housewife in the extreme limits of the city, without leaving her kitchen, can, with the celerity of Ariel or of a disseminated spirit, summon to her ear the downtown merchant to price his wares for her, to discuss their qualities with her, discovering by the very tones of his voice whether he tells her the truth or no, and then the order that she may place with him will presently be delivered in a wagon that propels itself. Is it any wonder she trades at the trade-center, or that the deserted grocer at the end of the car-line tells his casual visitor that times are hard? The toils are also tightening around the country merchant, as well. Every rod of macadam, every mile of suburban railway, every reduction in the cost of travel and whatever tends to eliminate time and expense and friction in supplying the needs of the public, all these are hostile to his thrift. Between the high tides of metropolitan commerce and the rural tradesman the principal barrier now remaining is the delay and cost and vexation of transit. That barrier would be removed in large measure by the establishment of the parcels post.

Call for County Union.

EDITOR KANSAS FARMER:—I hereby call a Farmers' Union meeting in the city of Topeka, to convene on Saturday, May 26, 1906, at 2 o'clock p. m., at Industrial Council Hall, over the "Fair" store, 618 Kansas Avenue, for the purpose of organizing a Farmers' Union in Shawnee County, and to take steps to organize a Farmers' Union Exchange, at Topeka, Kans., for the sale and exchange of garden produce, fruit, and other products of the farm. All members of the Farmers' Union, truck gardeners, fruit-growers, and farmers who are favorable to organization and in sympathy with the Farmers' Union are invited to attend. Each local Farmers' Union in Shawnee County should send five delegates to aid in forming a County Farmers' Union.

Objects of the Union:

To teach true cooperation; to practice justice, equity, and the Golden Rule; to assist members in buying and selling; to discourage the mortgage and credit system; to secure and maintain profitable and uniform prices for grain and live stock and other products of the farm; to eliminate gambling in farm products by boards of trade and other speculators; to bring farming up to the standard of other industries and business enterprises; to labor for the education of the agricultural classes in the science of crop diversification and scientific agriculture; to constantly strive to secure entire harmony and good will among all mankind, and brotherly love among ourselves; to form a more adequate union with those in authority for a more rigid and impartial enforcement of the law, that crime, vice, and immorality may be suppressed; to garner the tears of the distressed, the blood of the martyrs, the laugh of innocent childhood, the sweat of honest labor, and the virtue of a happy home as the brightest jewels known.

This is in no sense a political party, and we shall forever abstain from so much as a discussion of partyism, yet we do not feel it is our right to place shackles upon the mind nor a padlock upon the lips of any one who may wish to discuss for educational purposes the science of government, because upon this great rock must rest all important structures for either mental, moral, social, or financial development.

JAMES BUTLER,
State Organizer for The Farmers' Educational and Cooperative Union of America.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, Davis W. Clark.)
SECOND QUARTER, LESSON VIII.
Mark 6:14-29. May 20, 1906.

Death of John the Baptist.

Extremes met in the fortress-palace of Herod Antipas on the occasion of his birthday banquet. Nazaritish abstinence kept vigil in the dungeon. Herodian wantonness blazed and reeled in the banquet-chamber. Self-oblivious devotion below is matched by an overweening ambition above. The forgiving spirit, ready to pray for despiteful users, is offset by a vindictive thirst for the blood of one whose very life was a rebuke to sinners. On the inky agate of the Herodian court the character of John Bap-

ist stood out in high relief, a clear-cut cameo of smoky luster. . . . If any Herod ever needed a post-graduate course in the art of luxury, this one had it. He received his finishing touches during his visit to Rome. At that capital of debauchery he contracted the incestuous and adulterous connection which called forth the Baptist's stern and constant, "It is not lawful."

. . . This banquet seems to have been, in part at least, a military affair. Antipas was toasting and feasting his chilarchs. He was putting them in heart for the war into which his unnatural crime had plunged him. The ivory couches rested upon tessellated floor of banquet-hall in the marble palace, within the impregnable fortress of Machærus. The tetrarch's couriers had brought in haste from every quarter the daintiest viands of fish, flesh and fowl, while wine filled the golden goblets to their brim, and the air was scented with jet and spray of perfume. . . . Herodias was in her boudoir. Ambition was her ruling vice. She had discarded her rightful husband, father of her beautiful daughter, because, forsooth, he had no title. She married one who already sustained the relation of uncle and brother-in-law to her, and in doing so displaced a loyal wife from her husband's side. . . . At length, Herodias had a title and numerous palaces and fawning courtiers, but she had also a Nemesis, whose imperious, "It is not lawful," neither threat nor cajolery nor bribe could silence. Her strait was desperate. The uncompromising preacher of righteousness was making progress with her paramour. If he converted him she would be discarded and all lost. She had secured the Baptist's imprisonment. But locks and bars seemed no restraint to his subtle influence, while his dungeon walls seemed to echo his "It is not lawful!" with ever louder detonations.

. . . The desperate and wicked woman baited her hook with her daughter's modesty, and went angling in the pool of drunken revelry. When Antipas found himself caught, he lacked moral courage to snap the hook. He feared to vex Herodias, and had superstitious scruples about breaking his oath. He doubted the effect of his vacillation upon the courtiers and chilarchs whom he was seeking by this very banquet to attach more closely to himself. On the other hand, he was apprehensive of the effect on the people of the murder of a man who stood so high in their regard. Wretched man! This was the turning-point in his career. With the infamous choice of this hour he began the descent which terminated in disgrace, exile, death. . . . A moment later, Salome, a paragon of voluptuous beauty, flushed with her lascivious dance, carries, with an inhumanly steady hand, a golden platter from the banquet-table, on which rests the ghastly head of the martyr. A choice dish that for Herodias! It was her share of the banquet.

Money Kings Like the De Laval.

The De Laval Separator Co. have just issued a neat folder containing the names of some of the prominent people of the United States who use their machines. This list is a wonder, and reads like a directory of millionaires. It includes the Vanderbilt, Rockefeller, Carnegie, Morgan, Wanamaker, Law-son, Harriman, Hill, Belmont, Gould, Tiffany, Pope, Mackay, Armour, Swift, and Havemeyer names with many others of equal prominence. It also includes the Continental Creamery Co., the largest creamery company in the world. As these men have unlimited wealth they can buy the best machines in the world. They have selected the De Laval.

Cheap Rates to Boston.

\$19 for round-trip from Chicago (plus \$1), via the Nickel Plate Road, May 31 to June 9, inclusive, with privilege of extension of return limit to July 15. \$24 via New York City, all rail, or \$23 via New York City and steamer in both directions between New York and Boston. Stopover at Niagara Falls and Chautauqua Lake points, if desired, within limit of ticket. Tickets good on any train on above dates. No excess fare charged on any train on Nickel Plate Road. Meals in Nickel Plate dining-cars, on American Club Meal Plan, ranging in price from 35 cents to \$1. Mid-day luncheon 50 cents; also a la carte. Three through trains daily, with modern Pullman sleeping-cars to Fort Wayne, Findlay, Potosi, Cleveland, Erie, Buffalo, New York City, and New England points. Trains depart from La Salle St. Station, Chicago, the only depot on the Elevated Loop. Write John Y. Calahan, General Agent, Room 298, 113 Adams St., Chicago, for reservation of berths, in through standard and tourist sleepers, and full particulars.

\$15 St. Paul and Minneapolis and Return.

From Kansas City via Chicago Great Western Railway. Tickets on sale June 1 to September 30. Final return limit October 31. Equally low rates to other points in Minnesota, North Dakota, Wisconsin, and Lower Michigan. For further information apply to Geo. W. Lincoln, T. P. A., 7 West 5th St., Kansas City, Mo.

CORDIAL INVITATION**ADDRESSED TO WORKING GIRLS**

Miss Barrows Tells How Mrs. Pinkham's Advice Helps Working Girls.

Girls who work are particularly susceptible to female disorders, especially those who are obliged to stand on their feet from morning until night in stores or factories.

Miss Abby F. Barrows Day in and day out the girl toils, and she is often the bread-winner of the family. Whether she is sick or well, whether it rains or shines, she must get to her place of employment, perform the duties exacted of her—smile and be agreeable.

Among this class the symptoms of female diseases are early manifest by weak and aching backs, pain in the lower limbs and lower part of the stomach. In consequence of frequent wetting of the feet, periods become painful and irregular, and frequently there are faint and dizzy spells, with loss of appetite, until life is a burden. All these symptoms point to a derangement of the female organism which can be easily and promptly cured by Lydia E. Pinkham's Vegetable Compound.

Miss Abby F. Barrows, Nelsonville, Athens Co., Ohio, tells what this great medicine did for her. She writes:

Dear Mrs. Pinkham:—

"I feel it my duty to tell you the good Lydia E. Pinkham's Vegetable Compound and Blood Purifier have done for me. Before I took them I was very nervous, had dull headaches, pains in back, and periods were irregular, I had been to several doctors, and they did me no good.

"Your medicine has made me well and strong. I can do most any kind of work without complaint, and my periods are all right.

"I am in better health than I ever was, and I know it is all due to your remedies. I recommend your advice and medicine to all who suffer."

It is to such girls that Mrs. Pinkham holds out a helping hand and extends a cordial invitation to correspond with her. She is daughter-in-law of Lydia E. Pinkham and for twenty-five years has been advising sick women free of charge. Her long record of success in treating woman's ills makes her letters of advice of untold value to every ailing working girl. Address, Mrs. Pinkham, Lynn, Mass.

Ring-Bone

There is no case so old or bad that we will not guarantee Fleming's Spavin and Ringbone Paste to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of Fleming's Vest-Pocket Veterinary Adviser.

Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Readably bound, indexed and illustrated. Make a right beginning by sending for this book.

FLEMING BROS., Chemists,
212 Union Stock Yards, Chicago, Ill.

Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service for the week ending May 21, 1906, prepared by T. B. Jennings, station director.

CLIMATOLOGICAL DATA FOR THE WEEK.

Temperature. Precipitation

	Maximum	Minimum	Mean	Departure from normal	Total	Departure from normal
WESTERN DIVISION.						

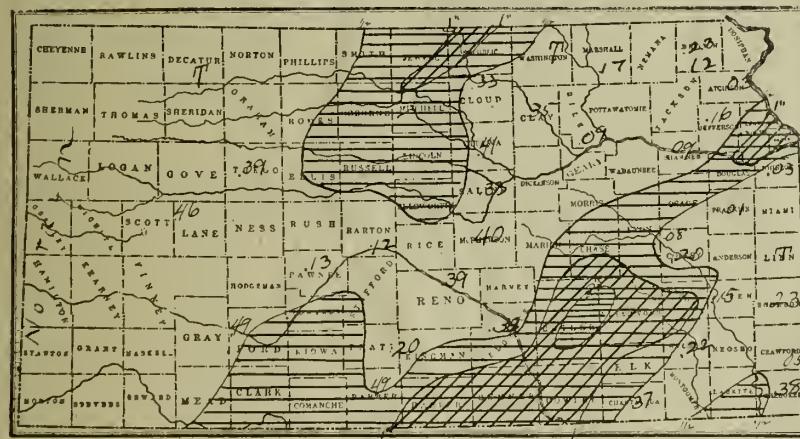
	Maximum	Minimum	Mean	Departure from normal	Total	Departure from normal
MIDDLE DIVISION.						

	Maximum	Minimum	Mean	Departure from normal	Total	Departure from normal
EASTERN DIVISION.						

	Maximum	Minimum	Mean	Departure from normal	Total	Departure from normal
GENERAL CONDITIONS.						

The first part of the week was cool in the extreme southwestern counties but over the rest

RAINFALL FOR WEEK ENDING MAY 19, 1906.



SCALE IN INCHES:
Less than $\frac{1}{2}$. $\frac{1}{2}$ to 1. 1 to 2. 2 to 3. Over 3. T, trace.

of the state the coolest part of the week occurred on Friday or Saturday; the lowest temperature was 33° at Norton on the 18th. The maximum temperature for the week occurred in the west portion of the State on the 16th and in the east portion on the 17th, except in the extreme southeastern counties where they occurred on the 18th. The maximum temperatures were 90° or above in the western half of the State, but below 90° in the eastern half except in Osage, Franklin, Coffey, Woodson, and Bourbon Counties; the highest temperature for the week was 95° at Toronto on the 18th. Showers have occurred in nearly every county of the State. Good showers occurred in the central northern counties with heavy rain in the northwestern part of Republic County. Good showers occurred in most of the southern counties with heavy rains in Harper, Sumner, Butler, Greenwood, and Woodson Counties. Good showers fell in Chase County and thence northeastward through Lyon, Osage, and Douglas Counties with heavy rain in Wyandotte County. Hamilton, Wallace, Thomas, and Norton Counties report no rain. Decatur, Washington, and Linn Counties report a trace of rain.

CONDITIONS IN DETAIL.

EASTERN DIVISION.

Allen.—It was a moderately warm week with strong southerly winds till Friday. Light showers fell on the 15th and 16th. Rain is very much needed. Three days were clear and the rest partly cloudy.

Alderson.—Uniformly warm weather prevailed. No rainfall occurred.

Athchison.—The week was very dry, only .03 of rain falling, and the sun being visible less than half the time. The first part of the week was characterized by high winds. Rain is needed badly.

Brown.—Three days were clear, two cloudy, and two partly cloudy. High winds prevailed the first four days. .02 of an inch of rain fell on the 15th. The dry weather is becoming serious.

Chase.—It was dry up to the 15th when a good rain fell. The highest temperature was 88° on the 17th and the lowest 52° on the 12th.

Chautauqua.—This has been a very pleasant week with light showers on the 15th and 16th. Maximum temperatures generally ranged in the eighties and minimum temperatures in the sixties.

Cherokee.—The week was warm and the days generally partly cloudy. A light shower fell on the 15th and .03 of an inch on the 18th.

Coffey.—The week was warm and dry. The highest temperature was 90° on the 17th and the lowest 55° on the 18th. The rainfall was .08 of an inch.

Crawford.—Only one light shower of .06 of an inch fell during the week. Maximum temperatures ranged in the eighties on all but one day and minimum temperatures in the sixties. All the days were clear.

Elk.—A good shower fell on the 15th and light ones on the 14th, 16th, and 18th, making the to-

tal for the week .06 of an inch. The temperature the first part of the week was about normal, the latter part above normal.

Franklin.—The week was warm and dry with only .01 of an inch of rain. The temperature exceeded eighty on five days and fell below 60° on only one morning.

Greenwood.—There was a fine rain of .90 of an inch on the 14th and light showers on four other days. The week was warm, the latter part being warmer than the first part.

Jefferson.—It is getting very dry. The rainfall for the week was only .06 of an inch. The weather has been very warm, the temperature being above 80° every day but one, and the minimum not falling below 60° any night.

Johnson.—The week has been warm, dry, and cloudy. A light shower of .03 of an inch fell on the 15th and a trace of rain on the 18th. The highest temperature was 87° on the 17th and the lowest 55° on the 19th.

Lambette.—The week was dry and windy up to the 18th when .03 of an inch of rain fell. The days were partly cloudy but rather warm.

Linn.—There was a good local rain in the southeast part of the county Friday afternoon, but only a trace fell during the week in the east central part. The temperature was uniformly high.

Lyon.—Rain fell on four days, the total for the week being .53 of an inch. Warm weather prevailed throughout the week.

Marshall.—Showers fell the first three days, the total being .07 of an inch. Three days were clear, three partly cloudy, and one cloudy. The temperature was uniformly high.

Osage.—Showers fell on four days as follows: 15th, .06; 16th, .08; 18th, .15; and 19th, .24. The highest temperature was 90° on the 17th and the lowest 60° on the 13th.

Riley.—Light showers fell on the 14th, 15th, and 16th. The weather was warm throughout the week.

Shawnee.—The week was warm and dry with southerly winds on six days and high winds on the 18th, 14th, 16th, and 17th. The temperature for the week averaged about 7° above normal daily. Only one light shower, .09 of an inch on the 15th, was received. Rain is very much needed.

Wilson.—The week has been partly cloudy and warm with a strong southerly wind most of the time, .07 of an inch of rain fell on the 15th and .05 on the 19th.

Woodson.—Showers fell on five days, the weekly total being 1.16 inches. The highest temperature was 92° on the 18th and the lowest 60° on the last three days.

Wyandotte.—On the whole the week was pleasant and seasonable and needed rainfall in the shape of a refreshing thunderstorm occurred on the evening of the 17th. During this storm hail fell at intervals, for ten minutes but no damage resulted therefrom. Light showers fell on the 15th and 19th.

MIDDLE DIVISION.

Barber.—Strong winds have been experienced. A thunderstorm occurred on the 17th. Light showers on five days have been very beneficial. The weather was warm all week.

Barton.—This has been a very windy week. Dust storms occurred on the 12th, 13th, and 16th, and thunderstorms on the 13th and 18th. Very

Clay.—Southerly winds prevailed on all but one day and temperatures were uniformly high, .05 of an inch of rain fell during the week.

Cloud.—The temperature ranged from 4° to 17° above normal every day. Four days were cloudy and three partly cloudy. Light showers fell on the 14th and 15th, the total being .04 of an inch.

Ellsworth.—Light showers fell in the northwestern part of the county the first of the week and heavy rains fell in the southern part. There was considerable sunshine and warm weather.

Ellsworth.—A light shower fell on the 13th and a good rain of .53 of an inch on the 15th. The weather was warm every day.

Harper.—The week was cool and pleasant with 1.85 inches of rain. There was a little fall on the 17th but no damage was done.

Harvey.—The week has been cloudy and threatening but only a small amount of rain has fallen.

Jewell.—Showers fell on the 13th, 14th, and 15th, the total being .56 of an inch. The weather was warm and generally clear.

Kingman.—Showers fell on every day but two, the total being .99 of an inch. There was considerable cloudiness and the weather was warm.

McPherson.—There was a refreshing rain of .40 of an inch on the 15th but more is needed. The temperature was moderate.

Ottawa.—It was a very warm, dry week with .01 of an inch of rain. More rain is needed. There was considerable cloudiness and the temperature was moderate.

Pawnee.—Strong southerly winds prevailed till the 17th when the wind shifted to the north. There were a few light scattered showers making about .13 of an inch.

Reno.—There were high southerly winds on the 12th, 13th, and 16th, and light showers on the 12th, 14th, 15th, and 18th, making a total of .18 of an inch. There was much cloudiness but the weather was warm.

Republican.—A trace of rain fell on the 13th, .02 on the 14th, and .02 on the 15th. The highest temperature was 87° on the 16th and the lowest 45° on the 18th.

Russell.—The days were uniformly warm, the highest temperature being 91° on the 16th and the lowest 53° on the 19th. Refreshing showers fell on three days, the total being .64 of an inch.

Saline.—Light but beneficial showers fell on the 14th and 15th, making a total of .03 of an inch. There were high winds on the 14th, 15th, and 16th. The weather was warm.

Sedgwick.—The cloudiness was above the average with showers on the 14th, 15th, and 16th, and sprinkles on the 13th and 18th. During the thunderstorm of the 17th a fine rain fell north and south of Wichita. The daily temperatures ranged from normal to 16° above normal.

Smith.—The week was warm. It was clear all week except on the 14th when we had half an inch of rain. The highest temperature was 87° on the 16th and the lowest 49° on the 15th.

Stafford.—Showers fell on the 13th, 14th, and 19th, making a total of half an inch of precipitation. The week was warm.

Summer.—Rain fell on four days. During a thunderstorm on the 17th, 1.30 inches of rain fell in less than an hour. The total rainfall for the week was 1.68 inches.

Washington.—Warm and clear weather prevailed. It was a dry week, only a trace of rain falling. The highest temperature was 85° on the 18th, and the lowest 50° on the 19th.

WESTERN DIVISION.

Decatur.—Warm, dry weather prevailed. Four days were clear and three partly cloudy. Only a trace of rain fell.

Ford.—.05 of an inch of rain fell on the 13th, .02 on the 14th and .02 on the 19th. The daily temperature ranged from 2° to 15° above normal. The weather was generally clear.

Hamilton.—It was a warm week with no rain. The highest temperature was 91° on the 16th and the lowest 44° on the 13th.

Lane.—With the exception of the 15th and 17th this has been a very warm week. A fine local shower fell on the 14th. The total rainfall for the week was .04 of an inch.

Norton.—It was a very warm, dry week with strong southerly winds. There was no rain but it is badly needed. The days were generally clear.

Scott.—Very beneficial rains fell on the 13th and 14th. The total precipitation was .79 of an inch. The highest temperature was 93° on the 16th and the lowest 49° on the 18th.

Thomas.—There were strong winds during the week but no rain fell. The highest temperature was 90° on the 16th and the lowest 44° on the 18th.

Trego.—On the 14th .39 of an inch of rain fell but no other precipitation occurred during the week. The weather was warm, the highest being 92° on the 16th and the lowest 49° on the 18th.

Wallace.—It was a very dry week with no rain and southerly winds most of the time. The maximum temperature was 90° on the 16th and the minimum 41° on the 18th.

OLDS ENGINES

There is no gas engine as simple as the Olds—Compare it with others and this statement is proved. The repairs cost practically nothing.

The Most Economical Engine

for pumping, sawing wood, feed grinding, churning and all farm work.

The reason why is interestingly told in our catalog mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalog showing Type A (2-8 h.p.) Types K and N (12-1200 h.p.) used with our Gas Producer, it will reduce fuel cost 75 per cent.

Celebrated Picture Free
For 4c in stamps to pay cost of mailing we will also send you Rosa Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16 x 20, beautifully colored, suitable for framing.

OLDS GASOLINE ENGINE WORKS

920 Chestnut St., Lausin, Mich

\$20 and less

From St. Louis and Kansas City to all points Southwest via M. K. & T. R'y, June 15th and 19th. Tickets good 30 days returning with stopovers in both directions.

To Dallas, Ft. Worth, Waco, Houston, Galveston, San Antonio, Corpus Christi, Brownsville, Laredo, and intermediate points. \$20

To El Paso and intermediate points. \$26.50

To Kansas, Indian Territory, Oklahoma, and Northern Texas points, one fare plus \$2, but no rate higher than. \$20

Correspondingly low rates from all points: From Chicago, \$25; from St. Paul, \$27.50; from Omaha and Council Bluffs, \$22.50.

Write for full particulars.

W. S. ST. GEORGE
Gen'l Passenger Agent, M. K. & T. R'y
St. Louis, Missouri



"SOUTHWEST"

Generous Combination Offer

The Kansas City Post, a new, metropolitan, Democratic Daily (per year) \$3.00
Poultry Ulure, an interesting monthly poultry journal (per year) .50
The Kansas Farmer 1.00

\$4.60

We have completed arrangements whereby we can furnish ALL THREE PUBLICATIONS for only \$2.50

THE POST is a good live, Democratic Daily paper containing all the news of importance, complete and accurate market reports; a page devoted to the work of folk and the home as well as a page devoted to sports.

THE POULTRY CULTURE is one of the best poultry journals published and is of particular interest to those already engaged or about to engage in the poultry raising business.

Here is a splendid opportunity for you not only to get a good live, daily, a splendid poultry and the "old reliable" Kansas Farmer about half price.

SUBSCRIBE AT ONCE

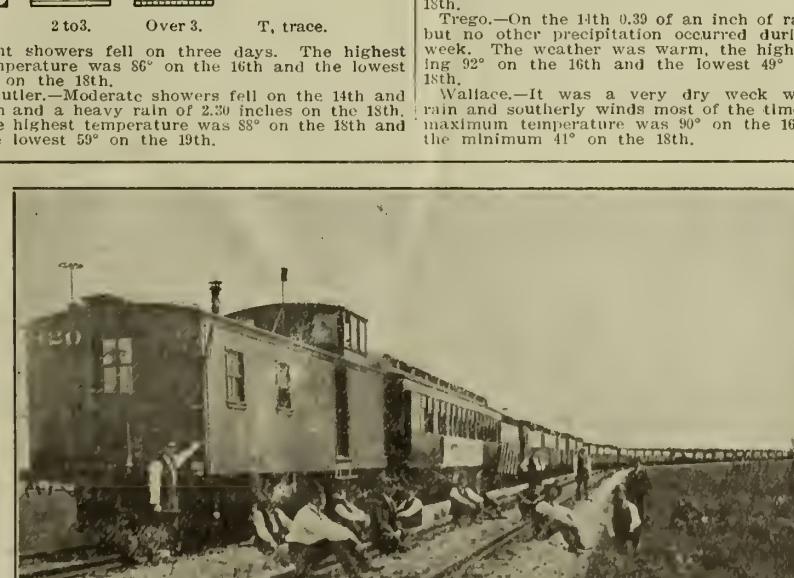
Address

THE KANSAS FARMER COMPANY
Topeka, Kan.

Tamworths

Lincoln Park Herd
of pure-bred Tamworth Hogs

Stock for sale. Write to E. L. Lindner and E. L. Waterman, Clay Center, Kan.



An exhibit which testified with waving banners and fluttering flags to the magnitude of Kansas manufacturing enterprise came into Ottawa this week in a shipment by special train of the largest single order of fence-wire ever executed by the Pueblo mills. The shipment is said to have been the largest of the kind ever made. The shipment was consigned to the Warner Fence Company, of Ottawa, for manufacture into the various kinds of fencing turned out by that institution. Twenty-seven cars, fully loaded, brought 675 tons of wire. The train, with the addition of special couches for the railroad officials and business men who accompanied it, made a day-

KANSAS FARMER.

Established in 1863.

Published every Thursday by
KANSAS FARMER CO.,
Topeka, Kansas.

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run off the paper, \$1.82 per inch per week.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per due or seven words per week. Cash with the order.

Electron must have metal base.

objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,
116 West Sixth Ave., Topeka, Kansas.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

CHOICE D. S. Polled Durham bulls, 5 to 16 mos' old. C. M. Albright, Route 2, Overbrook, Kans.

25 BEAUTIFUL RED MULEY BULLS FOR SALE—John Marriage, Mullinville, Kans.

HOLSTEINS—One yearling bull, extra choice, H. E. Cowles, Topeka, Kans.

A BUTTER-BRED Holstein bull calf—The best purchase for grade dairy herd. See report Santa Fe Dairy Educational Special. Start right in your breeding. Sixty-five head to choose from. Geo. C. Mosher, Hillcrest Farm, Greenwood, Neb.

REGISTERED HOLSTEINS and Jerseys of best milk and butter families. Youngsters at reasonable prices. Burton & Burton, Topeka, Kans.

FOR SALE—Some good young Shorthorn bulls just a year old by the 2300 pound Marshall Abbotts born 3rd 1883. Cheap, breeding and individual merit considered. D. Ballantyne & Son, Herrington, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 32 lbs. butter 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 28-quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

FOR SALE Five pure-bred yearling Shorthorn bulls. Will be pedigree in name of buyer; sired by Teddy Roosevelt 1902. Good, useful bulls at living prices. Henry Haub, Whiting, Kans.

to do is to poultice the foot with bran and linseed-meal, keeping the poultice wet; as soon as pus forms it will break at the heel at the place where the frog is attached to the bars. The foot at this place is rather soft and allows the pus to escape. Failing to find the trouble in this location, let us hear from you again, as you may be able to notice additional symptoms which will aid in the diagnosis of the case.

Lumpy Jaw.—Is there any remedy for the lumpy jaw in cattle that can be given internally that will cure it? One of my neighbors told me he saw something of the kind in your paper.

Derby, Kansas. A. W. P.

Answer.—A similar inquiry was answered in the KANSAS FARMER of May 4, 1905, as follows:

"Lump jaw in cattle is caused by a fungus known as the Ray Fungus (actinomyces) which is found on fodder, gaining access to the mouth on the food. If any abrasion is in the mouth, this fungus readily develops in the gums and later on in the jaw bone, causing it to become honeycombed, with a formation of abscesses, the jaw becoming greatly enlarged—thus the name 'lump jaw.' Treatment consists of opening the swelling and injecting the pockets where the pus is, with a tincture of iodine daily; giving internally, one-half dram of iodide of potash in a pint of water daily for about two weeks; then withhold the medicine for a few days and begin again."

C. L. BARNES.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should be signed with full name and should be addressed to the Veterinary Department of The Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter unanswered in The Kansas Farmer, no immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Cullions on Horse's Shoulder.—I have a horse that got his shoulder blistered while plowing; the blister was on right side of shoulder, and the size of my hand. I opened it at the bottom, and bathed it with hot water and arnica for ten days. It is about one-fourth the original size and is hard and calloused. How can I remove this callous?

Clearwater, Kans. S. P. T.

Answer.—I would advise cutting the callous part off the shoulder, then secure from a druggist the following: 1 ounce tannic acid, 2 ounces boracic acid, and 1 ounce acetanilid; mix and dust on wound daily.

Ailing Horse.—My 10-year-old horse is thin in flesh; his breath is foul at times; I feed him on corn and prairie hay; I do not work him much; he runs in pasture. I think there is something wrong with his stomach, but have done nothing for him.

A READER.

Rice County.

Answer.—If you will have the horse examined I think you will find that there is a bad tooth, and would therefore advise your having the teeth properly treated by a competent veterinarian.

Heifer Gives Bloody Milk.—I have a heifer that gives bloody milk; calf is a week old. What will cure the trouble?

J. E.

Lyons, Kans.

Answer.—If you will melt together 2 ounces of gum camphor and 4 ounces of lard, and stir until cool, then apply to your cow's udder, three times daily, I think you will remedy the trouble. Your cow has evidently had a little inflammation in the udder from some injury which has caused the bleeding.

Poll Evil and Ailing Chickens.—I have a mare that I think is getting poll evil.

Also have some good, healthy chickens that are looking spry. They break down and lose all control of their legs; they turn over after first day of illness and lay on the other side, but still look healthy. Look as though they were paralyzed in the back, but can use legs freely for kicking.

Jamestown, Kansas. O. W. C.

Answer.—(a) We are sending you press bulletin on fistulous withers and poll evil which we trust will give you the desired information.

(b) The only chickens I have ever known to act in this manner were those having crops bound from eating too much oats. Examine the crops, and if you find them full and hard make an incision in the skin over the crop, make a slit in the same so that the two cuts will not be in the same place, then empty the crop by inserting a finger. You may draw the outer incision together with thread and feed the fowl soft food for a few days.

It is possible that your fowls may have epilepsy, caused by intestinal parasites. It is characterized by fits. During the fit the fowl will make beating movements with its wings, its legs will draw up, and it will fall down and flutter around, but seldom dies. A few grains of bromide of potash or sulfur and turpentine given in the drinking water will prove beneficial in removing the worms.

Linne Mule.—My 5-year-old mule has been lame in hind leg for two weeks; holds leg up as though in great pain. I examined the foot carefully but could find nothing; the foot and leg is carried well forward and up. I think the trouble is in the hock joint, but no well-defined soreness was discovered. Am I correct in diagnosing the trouble as spavin?

A READER.

Leavenworth, Kans.

Answer.—From the fact that you did not find any soreness in the hock joint, and also that the mule carries foot well forward and up would largely remove the idea of the seat of the trouble being in the hock joint. From the history of the case I would be inclined to think the trouble is from a stone bruise, and before long you will notice a decided swelling above the foot and about the fetlock. In that event the best thing

CATTLE.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers singly or in carlots. Dean Bartlett, St. Marys, Kans.

PEDIGREED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. M. J. Rentz, Leavenworth, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

HORSES AND MULES.

FOR SALE—A good black heavy-boned Jack. Price, \$250 if sold soon. Do not write but come and see him. I also have others for sale cheap. Address Joseph Pilzinger, Box 14, Olmitz, Kans.

ILLINOIS HORSE COMPANY, Des Moines, Ia., can supply 60 Imported and American Bred Pedigreed draft stallions and 20 coach stallions, 40 jacks at one-half the regular price. Time given, will take part trade. Write for bargains.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howard, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat swaybacked. Suitable reward for return. J. W. Gillard, 836 Highland Ave., Topeka, Kans.

AGENTS WANTED.

SALESMAN WANTED TO SELL SOUTHERN CALIFORNIA REAL ESTATE—Specialties, farm lands, acre and town lots. Hustlers make \$500 to \$2,000 monthly. Southern California land sell almost without effort. Every one wants them. We furnish free instructions, strong endorsements, up-to-date illustrated literature and adequate help from office. Exclusive territory. Sub-agents coin your money. Unusually liberal commissions. No competition. No experience necessary. No investment but energy required. Free course in Scientific Salesmanship. A. A. Peterson Realty Company, 514 Stimson Bldg., Los Angeles, California.

Wanted—Gentleman or lady with good reference, to travel by rail or with a rig, for a firm of \$250,000 capital. Salary \$1,072 per year and expenses; salary paid weekly and expenses advanced. Address with stamp, Jos. A. Alexander, Topeka, Kans.

HELP WANTED.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

SEEDS AND PLANTS.

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

PLANTS FOR SALE—Cabbage, Henderson's Early Summer, Succession, 30 cents per 100, \$2.50 per 1,000. Tomatoes, Early Dwarf Champion, Beauty, Stone, Matchless, 30 cents per 100; \$2.50 per 1,000. Sweet Potatoes, Yellow Jersey, Yellow Nansemond, 20 cents per 100; \$1.50 per 1,000. Red Jersey, Red Bermuda, Black Spanish Southern Queen, Viningless 25 cents per 100; \$1.75 per 1,000. F. P. Rude & Son, Box 671, North Topeka, Kans. Ind. Phone 4003.

SWINE.

CHOICE BARKSHIRE BOARS FOR SALE—Of the best breeding and from 125 to 240 pounds in weight. G. D. Willems, Inman, Kans.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Euclid, Kansas.

SCOTCH COLLIE PUPS.

SCOTCH COLLIE PUPS for sale from registered stock. G. B. Gresham, L. Box 102, Bucklin, Kans.

REAL ESTATE.

FREE—Hundred-page illustrated book on British Columbia. Accurate information about its wonderful natural resources. Send postal to The World Printing & Publishing Co., Ltd., Vancouver, B. C.

Do You Want a Farm Free?

Your chance is as good as anyone's. Millions of acres of Indian Reservation land will be given away by the U. S. Government. Write to us for information free of charge.

Homeseekers' Information Agency
Steele Block - Denver, Colo.

Fine 800 Acre Ranch

A fine 800 acre tract, 6 miles from county seat, 2 miles from station. All fenced, one half mile of Arkansas River front, 320 acres of fine river bottom land, nearly all of the balance of the land good farm land; 8 acres of good timber. River bottom land, good sugar beet or alfalfa land. Good neighborhood. An ideal ranch. Price, \$20 per acre. Would consider a trade for a good farm near town, nice clean stock of merchandise or good rental property. Call or write to address G. L. Bryant, owner, Cimarron, Kans.

MISCELLANEOUS.

NOTICE—My application for a permit to sell intoxicating liquors, according to law at 115 E. 5th St., in the 2d ward of the City of Topeka, is now on file in the office of the Probate Judge of Shawnee Co., Kansas. The hearing of the same is set for May 26, 1906, at 9 o'clock a. m. C. R. Hoyt.

DOGS AND BIRDS—For sale dogs, hogs, pigeons, ferrets, Belgium-hares, all kinds; \$8 40-page illustrated catalogue. C. G. Lloyd, Sayre, Pa.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kansas.

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; illustrations by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$87.50 to as high as \$155.00 per month. Wanted 400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

AGENTS WANTED—Sell \$1 bottle Sarson's Paraffin for 35c; best sellers; 200 per cent profit. Write to-day for terms. F. P. Greeley, Dept. 40, 25 Lake St., Chicago.

Stray List

Week Ending May 10.

Stafford County—W. W. Hall, Clerk.
HORSES—Taken up by T. S. Maupin, in Ohio tp., (P. O. St. John), April 17, 1906, one dark brown gelding, 15 hands high, weight 1000 pounds; blaze in face, three white feet, about 8 years old; valued at \$100; one coming 2-year-old gelding, light bay, 13 hands high, weight 650 pounds, blaze in face, dark mane, and bad tail; valued at \$20.

Week Ending May 24.

Lyco County—W. F. Eggers, Clerk.
MARES—Taken up by Frank Hrenich in Center tp., (P. O. Olpe), 2 ponies, one about 17 years and the other 3 or 4 years old, both dark bay in color, the older mare has saddle mark and left hind foot white, the young mare, no mark or brand; valued at \$15 and \$35.

LEGAL NOTICE

Notice of Stockholders' Meeting.
Notice is hereby given that the annual meeting of the stockholders of The Topeka Northwestern Railroad Company will be held at the office of the company in the Office Block in the City of Topeka, Shawnee County, Kansas, on Tuesday, the 12th day of June, 1906, beginning at 10 o'clock a. m. H. A. Scandrett, Secretary.

THE
**COLUMBIA RIVER
WONDERLAND**
With its incomparable
scenery is best reached via the
UNION PACIFIC
Whose fast through daily trains run 200 miles
in broad daylight along this matchless
river. An opportunity of visiting
Yellowstone Park en Route.
THE SHORT LINE TO
PORTLAND
AND THE NORTHWEST
INQUIRIES OF
F. A. LEWIS,
City Ticket Agent.
or
J. C. FULTON,
Depot Agent.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

Money to Loan

On Eastern Kansas Real Estate

Semi-annual, or annual interest, five, seven, or ten years time, with privilege of payments at any interest period.

No Delay in Furnishing Money

Merriam Mortgage Company

Columbian Bldg., Topeka, Kansas

FIFTY farms in Southern Kansas, from \$15 to \$70 per acre; can suit you in grain, stock, or fruit farms. I have farms in Oklahoma, Missouri, and Arkansas for sale or exchange. If you want city property, I have it. Write me. I can fix you out. Wm. Green, P. O. Box 988, Wichita, Kans.

LAND FOR SALE
In western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FOR SALE AND EXCHANGE
Merchandise and City Property, Kansas and Texas Lands. If you want any thing in this line write us. Quisenberry & Carlson, Marion, Kans.

FOIT SALE CHEAP—Fine 320 acre farm, five miles north of Olmitz, 260 acres under cultivation, 60 acres pasture, 7 acres alfalfa, nice orchard, plenty of good water, good improvements and on rural free delivery, telephone in house. Reasons for selling, wish to quit farming. Will sell cheap if sold this month. Address James Pitzinger, Route 1, Olmitz, Kans.

GOVERNMENT LAND and others cheap and fertile. Described free to annual subscribers. Farm and ranch, \$1 per year, Sheridan Lake, Colo.

320 ACRES, 6 miles from Emporia; 6 room house, barn 30 by 36, cattle shed 20 by 40; good orchard and other fruit, 70 acres cultivated; 300 acres can be plowed or mowed; watered by wells and creeks; one mile to school. Price \$28 per acre. Can give immediate possession. Hurley & Jennings, Emporia, Kans.

4,000 ACRE STOCK RANCH at one-half price to close estate; finest farming; healthy climate. Large tree range adjoining; land alone, \$6 per acre. Improvement and stock about \$25,000. Address Libble Blanchard, Clearwater, Mont.

WANTED—To get 200 acres prairie, broke, price \$150, and old ground plowed after harvest. Address W. W. Cook, Russell, Kans.

FINE STOCK FARM FOR SALE—640 acres one-half in cultivation, balance in pasture, mostly seeded to Kentucky blue-grass, well watered, about 40 acres in alfalfa, all fenced and cross-fenced, bearing a good lawn with shade, large eight-room house, commodious barns for stock and hay, fuel, poultry, and ice houses, and other outbuildings, feed yards, corrals, stock sheds, one tenant house; convenient to church and school, on Rural route; 1½ miles from station on double track railway, 12 miles east of Topeka, the State capital, 54 miles west of Kansas City, in the midst of a splendid farming country. It is now occupied by the owner, who has lived there for more than thirty years. Price \$37.50 per acre. Easy terms. Address WILSON & NEISWANGER, 116 W. 6th St., Topeka, Kans.

160 ACRES—**ALL BROKEN**—A good wheat farm, 100 acres in wheat, ½ of which goes with place; balance to be put in spring crop. Price, \$3,300.

640 ACRES—**ALL FENCED**—5 miles from town; 100 acres in cultivation, balance in pasture. Price \$12.50 per acre if sold soon.

KRAMER & GOLD, Plainville, Kansas.

FOR SALE—A good farm of 320 acres in Anderson County, Kansas, main line Missouri Pacific Railway, R. F. D., near to school and church. American community, good improvements; \$22 per acre. A bargain. Address O. J. Prentice, 156 Wahash Ave., Chicago.

FOR SALE—Choice fruit ranch, 20 acres near Santa Fe, New Mexico; apple orchard, full bearing. Splendid house, complete in every particular. Finest climate in the world; high price for fruit. Small first payment takes it. Write to-day to owner W. H. Wise, Santa Fe, New Mexico.

FOR SALE—Coal land, farms, and timber. The place for a poor man to get a home. Campbell, box 1453, Fort Smith, Ark. Real estate man need not apply.

EXCHANGE—All kinds of properties for trade or exchange. Also large lists of farms for sale. If any thing of this kind interests you write us at Minneapolis, Florence or Salina, Kansas. Garrison & Studebaker

440-ACRE FARM—Close to good town, very good buildings, with growing crops, at \$17 per acre. Other bargains in improved farms with crops. Missouri farms for sale. California land for sale. Western Kansas land at \$2.50 to \$20 per acre. Write or come and see what I have in the way of bargains in city property. J. Baldwin, Arlington, Kans.

FOIT SALE—Improved farms, at prices from \$24 to \$50 per acre. Write, stating exactly what you want, and we will send description. The Nordstrom-Henstedt Realty Co., Clay Center, Kans.

A 320 ACRE FAIRLY within two miles of good town. Good new house, barn, stables, all bottom land, the best of alfalfa land, two artesian wells, one at house and one at barn; good orchard, good for any kind of crop; a good fish pond near the house with plenty of fish. J. Baldwin, Arlington, Kans.

FOIT SALE—The Dean Bartlett ranch, consisting of 3,200 acres on the New Topeka and Northwestern railway. Near the town of Emmet, Pottawatomie County. Will sell all or a part. Address Dean Bartlett, St. Marys, Kans.

FOIT SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Hitchcock, Land & Industrial Agent, Washington, D. C.

FOR SALE Farms—Bargains; 500 farms, stock ranches. Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Kans.

FARMS WANTED

Will the owner of a well improved productive farm kindly communicate full description, price and terms to the undersigned. Cash will be paid if place suits. Possession to be given in the fall. Address Box 988, Minneapolis, Minn.

REAL ESTATE.

REAL ESTATE.

REAL ESTATE.

FARMERS!

There's Land Waiting For YOU In NEW ZEALAND

The Paradise of the Pacific; Sixteen Days Steam from San Francisco

THERE IS ROOM FOR THOUSANDS OF SETTLERS

Rich Soil. Abundance of Water. No Droughts. No Snow-bound Winters. Mild and Equable Climate. A Land of Peace and Plenty. New Zealand's WEALTH Per Head of Population is the Highest in the World.

ITS DEATH RATE IS THE LOWEST IN THE WORLD.

Government land is obtainable on easy terms, perpetual leasehold or freehold. Government assistance to new settlers. State loans to farmers at low rate of interest.

New Zealand is a magnificent dairyland, meat-raising, lumber and wool-growing country. Last year the produce of the farms of New Zealand totaled a value of one hundred million dollars. New Zealand's butter, wool and frozen mutton fetch the highest prices in the world's markets.

New Zealand Railways are owned by the Government. Cheap freight and passenger rates. Government and Municipal ownership of public utilities. Government Trust Offices, Insurance, Savings Banks, etc.; Government Sanatoria and Hot Mineral Water Spas.

New Zealand is a region of grand and novel scenery. It is largely visited by American tourists who escape the rigors of winter.

A land of splendid sport. Trout-fishing and Deer-stalking. Thousands of miles of angling waters carrying the biggest trout in the world.

It is SUMMER in New Zealand when WINTER in America. New Zealand's summer is cool and enjoyable for traveling. Comfortable hotels. Good Transportation. Cheap rates.

YOU WILL FIND OUT ALL ABOUT NEW ZEALAND

by dropping a postcard asking for information and literature to T. E. DONNE, Superintendent, Government Department of Tourist and Health Resorts, Mail Steamers from San Francisco to New Zealand Every Three Weeks.

Going West to Buy Land?

Call and see or write to STEVENS & RUBY, Stockton, Kans., who have a large list of lands in western Kansas, from \$4 to \$8 an acre. Special bargains in wheat lands and ranches in several western counties. 25,000 acres land in Rooks County for sale. Exchange a specialty.

CENTRAL KANSAS LAND

Where alfalfa, corn and wheat are the "big three" 800 acres wheat land, 9 miles from Russell, at \$12.50 per acre, half 120 acres wheat; 320 acres in Lincoln county at \$12 per acre; 640 acres all river bottom in Lincoln County at \$40 per acre. Well improved. Minx & Bower, Lincoln, Kans.

Phillips County and Western Kansas

280 acres fine, level land, fair improvements, 2 miles good Phillips County town, worth \$35 acre; may price \$25. 160 acres with 110 acres fine farm land, \$15 acre. 160 acres Western Kansas fine alfalfa land, \$6 acre. About 70 other good tracts in Western Kansas at \$4 to \$7 acre. W. B. Gaumer Realty Co., Phillipsburg, Kans.

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,

Almena, - - Kansas

Sheridan County Land

A choice section six miles from Hoxie, \$12.50 per acre. 320 acres, \$2,500. A well improved 800 acre tract, three miles from town, perfect land, \$15 per acre. Thousands of acres of northwestern Kansas land for sale at \$8 to \$15 per acre. Write for statistics showing the products of the County in the past years and our price list.

Sheridan County Land Co.

Hoxie, Kansas

Looking for Land?

Come to Downs, Kans., a thriving city of 1500 people, 200 miles west of Atchison, division point on the Missouri Pacific Railway, in the celebrated Solomon Valley, in Osborne County, where we raise corn, wheat, alfalfa, and other cereals successfully. Get our list and map. THE DOWNS REALTY CO., Downs, Kansas.

Bates County, Missouri

The great corn and grass region of Western Missouri. Near to Kansas City. A few good propositions. Send for our booklet.

HUTLER LAND COMPANY,

Hutler, Missouri

Oklahoma Public Lands

Half million acres most fertile land in Oklahoma, near Lawton, opened to settlement this summer under U. S. Homestead Laws. Get an Oklahoma farm cheap. Adjoining lands now \$25 per acre. Maps and full information regarding opening ready. Fifty cents.

CATRON & CO., Lawton, Okla.

PRESIDENT ROOSEVELT SAYS:

"There may be some place in the world equal to Puget Sound, but I don't know where it is."

Best year-around climate in the United States. Fertile soil and immensely rich and varied resources.

Send 4¢ for finely illustrated 64-page free booklet on this wonderful section of the United States.

Chamber of Commerce, Everett, Wash.

60 Miles South of Kansas City

You know the value of well drained bottom land near Kansas City. Let me tell you all about this bargain. 400 acres rich prairie land in Bates County, Missouri, 5 miles from railroad town, on telephone line and mail route. \$32.50 an acre and a bargain. Write today to

HART & HOLLOWAY,

Butler, Missouri

\$5,000

Reward will be paid to any person who can find one atom of opium, chloral, morphine, cocaine, ether or chloroform in any form in any of Dr. Miles' Remedies.

This reward is offered because certain unscrupulous persons make false statements about these remedies. It is understood that this reward applies only to goods purchased in the open market, which have not been tampered with in any way.

Dr. Miles' remedies cure by their soothing, nourishing, strengthening and invigorating effects upon the nervous system, and not by paralyzing and weakening the nerves as would be the case if these drugs were used.

For this reason Dr. Miles' Anti-Pain Pills are universally considered the best pain remedy.

I have suffered for 25 years with severe pains in my head, heart and back, and have tried everything I could get and could not find any relief until I got a box of Dr. Miles' Anti-Pain Pills. I suffered as long as 12 hours at a time with such severe pains that I feared I would lose my mind. The Anti-Pain Pills gave me relief in from 10 to 20 minutes. I do not have to use Morphine any more. I wish you would publish this so that other sufferers may find relief."

L. A. WALKER.

R. F. D. No. 6, Salem, Ind. Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it does, 25 cents. Never sold in bulk.

Miles Medical Co., Elkhart, Ind.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid including the KANSAS FARMER one year both for only \$2.50. Address, THE KANSAS FARMER CO., Topeka, Kans.

Watch Tacoma Grow!

Population, 1100, 37,714

Population, 1900, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for tending products of Washington; wheat, lumber, coal. Send stamp for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

A CHOICE 160 ACRE FARM in Lane County, Kansas

Only six miles from County seat, level, good soil, good water, near to school and neighbors; this is a splendid farm and is a good investment for anyone; no improvements. Price, \$1,400, net cash.

Albert E. King, McPherson, Kans.

THE KANSAS FARMER

Duroc-Jerseys

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS — large-boned and long-bodied kind. Fall pigs for sale. Prices reasonable.
R. S. COWEE, R. F. D. 2, Scranton, Kans.

Crimson Wonder 38755 Herd
Will have something fine to offer. Can furnish trials not asked sired by Crimson Wonder 38755 and Kerr's Champion 28355.
Mr. & Mrs. Henry Shander, Waukeet, Kans.

Egypt Valley Durocs
Herd headed by Egypt Lad 34023. Stock always for sale. Choice full boars and gilts, reasonable. Also six fine gilts bred to Lord's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kas.

Orchard Hill Herd of Duroc-Jerseys.
Summer and fall boars and gilts for sale, sired by Kaubio Chief, grandson of Ohio Chief. Gilts bred to Norton's Top Notcher by Tip Top Notcher.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled
A few fall boars by State Fair prize winners and Red Polled bulls for sale.

J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS

I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 93, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.

J. F. CHANDLER, Frankfort, Kans.

Duroc's from the High-
land Herd. The blood of the leading strains of the country. Our herd is headed by Model Chief Agua 42943, and Ohio Major 36357. Look up their pedigrees and see if you can beat them. Orders booked now for fall boars. Grant Conner, Greene, Kans. Mention Kansas Farmer when you write.

STEELE'S DUROCS

I have eight boars of December farrow, weighing about 75 or 80 pounds, that are by Paul Wonder 26236, he by Oom Paul 17679. This is a good herd boar material, and the price is right. I shall have for future delivery boars by Steele's Model 107654 by Chief Orion 28517, and a few by Paul Wonder. Please write me your wants.

C. G. STEELE, Barnes, Kansas

Poland-Chinas

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeders of Poland China Hogs.

We have for sale at reasonable prices 10 gilts bred to Challenger 38340; also a boar pig by Compromise 88203. Write us for prices and full description.

CEDAR GROVE HERD

Of pure-bred POLAND-CHINA HOGS
We will have some bargains this season to offer the public. J. A. Hebrew, Stockton, Kans.

Mention Kansas Farmer when you write.

Square Deal Stock Farm

Wm. D. Calder, Prop., Bancroft, Kans.

We have for sale at \$20 each, two Poland-China hogs, sired by Square Deal 36749 by Highland Chief Jr. 29364, dam Daisy Calder (87343) by Calders Perfection (33581).

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choate, Perfect Boy and Lucy Choate, 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Ax lines
Poland-Chinas and Barred Plymouth Rocks

Eggs \$1 per sitting. Choice fall pigs, either sex.

E. E. AXLINE Oak Grove Missouri

John Bollin Route 5
Leavenworth, Kansas

Breeds and sells Poland-Chinas

*The State and World's Fair winning boars Nemo L's Duke and The Flicket in service. Bred sows and serviceable boars for sale.

Oak Grove POLAND-CHINAS...

New L's Duke, prize-winner and sire of winners and Sir Darkness out of Darkness and by Chief Perfection 2d in service. A few in service.

Gus Aaron, Leavenworth, Kansas

Poland-Chinas

Kansas Herd of Poland-Chinas has bred gilts and W. R. C. Leghorn cockerels. F. P. MAQUIRE, Hutchinson, Kans.

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.

T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Oward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to

JOHN D. MARSHALL, Walton, Kas.

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376s out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion, 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

C. F. Hutchinson, Bellaire, Kansas
Third year a Breeder of
Poland-China Swine

We raise the big fellows that fatten large litters. The kind that fills the pork barrel. Write us for list of our winners at Nebraska and Kansas State Fairs. Our herd boar Bright Look weighs 1,000 pounds in show condition. Stock for sale. If you want the big kind write us.

**Spring Creek Herd of
POLAND-CHINA SWINE**

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred for sale, to either Address

G. M. Hebbard, Route 2, Peck, Kansas

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.

C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

Chester-Whites**O. I. C. SWINE**

Choice young stock of both sex for sale at very low prices.

S. W. ARTZ, Larned, Kans.

World's Fair CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTMIRE, Peculiar, Mo.

O. I. C. Hogs**Scotch Collie Dogs**

B. P. Rocks

One hundred grand pups sired by the two greatest stud dogs in the west, Cragsmere Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as fine blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm, H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Boars closely related to our World's Fair Winners ready for buyers.

Headquarters for up-to-date Chester-Whites

O. L. KERR, Independence, Mo.

Berkshires

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prime 6477s, and Berryton Duke 72946. Boar at head of herd, Jourist topper 78277.

Wm. McAdam, Netawaka, Kans.

Berkshires

Of both sexes for sale. Herd headed by Imported Baron Compton 89195.

W. J. Grist, - Osawkie, Kans.

Ridgeview Berkshires

SOLD OUT except one yearling boar. Get in your order for pigs of spring farrow. One herd boar for sale.

MANWARING BROS., Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds.

40 extra choice gilts, 100 to 150 pounds.

Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 7700, and headed by the best Gentry boars 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

QUROLLO'S QUALITY Berkshires

Herd Boar, Lord Bacon 87145

Strong boned, growthy, well finished pigs at low prices for quality. Also S. C. B. Leghorns of high quality. Take electric line from Kansas City, Mo. Home phone 292.

James Quroollo, Independence, Mo.

KNOLLWOOD BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion sow and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

Aberdeen-Angus**Aberdeen-Angus Cattle**

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.

CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED**Angus Cattle**

Herd headed by HALE LAD 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale

PARRISH & MILLER, Hudson, Route 1, Stafford Co., Kas.

Red Polls

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address L. K. Hazeltine, Route 7, Springfield, Mo. Mention this paper when writing.

The Eacker - Brown Farm Company Delphos, Kansas

Breeders of English Red Polled Cattle. We have three comly 2-year-old bulls for sale at a bargain. Write for description and prices. Mention the Kansas Farmer.

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens

Address, S. C. BARTLETT, Route 5, - - - - - Wellington, Kansas

HALCYON HOME STOCK FARM**Polled Durhams**

Offer some fine blooky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

Red Polls

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, Pomona, Kansas

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see.

CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning RED POLLLED CATTLE.

Serviceable bulls for sale at prices to sell them.

WILKIE BLAIR, Route 5, Girard, Kansas

Herefords**Registered Herefords**

Individual merit and choicest breeding. Dale DuPill

cate 2d at head of herd. Correspondence solicited.

A. JOHNSON, - - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56011 and Lord Albert 131557 head of herd.

Choicer young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

CANEY VALLEY Herefords

Beau Donald 4th 86141 and Disturbance 129139 in service.

Herd founded from best Missouri and Indiana herds. A carload of choice Beau Donald bulls, 12 to 24 months. Younger bulls and 25 heifers 8 to 30 months old for sale. Come and see or write at once.

L. H. Sullivan, Cedarvale, Kansas

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235 and Printer 86634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

Shorthorns**Plainville Shorthorn Herd**

Headed by Prince Lucifer 188685

A pure Scotch bull. Stock for sale at all times.

Shorthorns

M. C. VANSELL Muscotah, Kansas
Breeders of Shorthorns, Poland-Chinas and Barred Plymouth Rock chickens.
For sale a choice, pure Scotch bull, color red, no horns.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by
L. A. MEAD,
Kingdom, Ford County, Kansas.
For Sale—Bulls and females. Inspection invited.

Registered Shorthorn Cattle

Duroc-Jersey Swine
Also choice B. P. Roeks. All Stock fashionable bred, and choice individuals. For Sale—One July 27, '06 bull; price, \$100. Eggs, Bradley mating, \$2 per dozen; range eggs, \$1.50 per dozen; \$5 per 100.
G. E. Newton, Whiting, Kansas
(Successor to Newton Bros.).

Rocky Hill Herds

Shorthorns and Percherons.

In special offer a number of Scotch and Scotch-topped females bred to Sultan, a good Scotch bull. Prices reasonable.

J. F. TRUE & SON, Perry, Kans.
R. R. Station Newman, 12 mi. east of Topeka.

Ashcraft**Shorthorn Herd**

The Scotch Victoria bull Scottish Minstrel 234970 at head of herd.

A. M. Ashcraft, Atchison, Kansas

Alysdale Shorthorns

Prince Consort 187003, by Imp. Prince of Perth and out of Goldfinch, full sister to the champion Lavender Viscount in service.

Cruickshank and Cruickshank - topped strains.

Young Bulls for sale, sired by Prince Consort, Lord Mayor, Mayor Valentine and Proud Knight. Inspection invited.

C. W. Merriam, Prop.
Topeka, Kansas

Cedar Heights Shorthorns

Scotch bulls in service. Cows carry three to five Scotch crosses on standard Shorthorn foundations. Four bulls 8 to 12 months. One of two herd bulls for sale, some cows and heifers. All red, and all in good condition. Come and see our cattle.

D. H. FORBES & SON
Route 8. Topeka, Kansas.

New York Valley Herds**of Shorthorns and Berkshires**

Baron Rupert 242267 at head of Shorthorns. Young Scotch-to-ped and Bates bulls for sale. Royal Star 72863 and Lee Star 88228 sired by the great Champion Lord Lee 81198 at head of Berkshires. Choice early fall boars and gilts for sale. Also a few brood sows. Telephone on farm.

J. T. BAYER,
Route 1. Yates Center, Kans.

Horses and Mules**Do You Want to Buy a Jack?**

If so, I have some extra good ones to sell, of the best strains of breeding in Missouri. Good breeders, large black, with light points, prices right. Write me what you want. Address

WALTER WARREN, Veterinarian
Windsor, Missouri

Kentucky Jacks AND Stallions

25 Choice Registered Black Jacks, 15 to 16 hands high, 2 to 6 years old, to select from at our barns at Marlow, Kans. The largest and best bunch ever shipped from Kentucky; also Saddle stallions and a few Jennets.

J. F. Cook & Co.
Marion, Kansas Lexington, Kentucky

One Pair Black Percheron Mares
Eligible to registry, weight about 1,700 pounds
4 and 10 years of age.

One Black Percheron Stallion
Brilliant 40160, 12 years old, and Monarch 151, 18 years old. Also 3 young Jacks, Spanish Mammoth breeding. Will exchange stallions or Jacks or trade for other stock. This stock is all perfectly sound and good breeders.

T. H. TERRY, Hawley, Kansas

CHILlicothe Auction School
OPENS JULY 9, 1906

Instructions in nine branches of Auction Sales, including Live Stock Judging, by seven teachers. Write for particulars and terms.

HARRY W. GRAHAM, Pres., Chillicothe, Mo.
Live Stock Auctioneer

FIFTH TERM
JONES' NATIONAL SCHOOL

of
Auctioneering and Oratory
Davenport, Iowa

5th term opens July 22, 1906. All branches of the work taught. Students now selling in 12 states.

For Catalogues write **Gary M. Jones**, President

Galloways

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, BURTON, KAN.
Breeder of Galloway Cattle

Galloway Bulls

Thirteen strong 2-year-old bulls for range at special prices; also a few younger bulls. Come or write at once.

W. Guy McCandless,
Cottonwood Falls, - Kansas

Auctioneers**John Brennen**

Live Stock Auctioneer
Esbon, - Kansas

I refer you to any of the breeders of live stock in Northern Kansas as to my ability as an auctioneer. Write me for dates.

Col. T. E. Gordon

Live-Stock Auctioneer
Waterville, - Kansas

Reference: Those for whom I have sold.

BERT FISHER
Live Stock Auctioneer

North Topeka, Kans., and Norton, Kans.
Thoroughly posted on pedigrees. Ten years' experience. Satisfaction guaranteed. Write or wire for prices and dates.

Free sale tent at cost of handling, only when I am employed. Ind. Phone 25. Bell Phone 22.

Z. S. BRANSON
Live Stock Auctioneer

Lincoln, Nebraska

Thorough knowledge of breeds, bloods and values
Terms reasonable. Inquiries cheerfully answered.

John Daum Nortonville, Kansas

Live Stock Auctioneer

Fine stock specialty. Large acquaintance among stock-breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

R. L. HARRIMAN

AUCTIONEER
Bunceton, Mo.

First
Class
Service.
Best
Results.
Terms
Low.

JAS. W. SPARKS

Live Stock Auctioneer
MARSHALL, - MISSOURI

Fifteen
years
selling
for
America's
best
breeders.
Moderate
terms
for
best
service.

Horses and Mules**200 HEAD****Imported German Coach, Percheron and Belgian Stallions on Hand.**

All sound, sold on responsible breeding guarantee. Easy terms to responsible buyers.

Write us for any information in regard to getting a good stallion in your county.

STABLES.

Kansas City Stock Yards
Sedalia, Mo.
Portland, Oregon
San Jose, Cal.

Lafayette, Ind.
Nashville, Tenn.
Staunton, Va.
London Canada.

J. CROUCH & SON, PROPRIETORS.**CHEYENNE VALLEY STOCK FARM PERCHERONS**
Patsy and Keota Scoggan.

At Head of Stud

STALLIONS MARES AND COLTS FOR SALE. ALSO COACH HORSES

F. H. SCHREPEL,
Ellinwood, Kansas

ELDORADO STOCK FARM

A choice lot of imported and home-bred Percheron stallions and mares for sale.
E. J. HEWITT, Proprietor, Eldorado, Kansas

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

THE ROAD OF MONOPOLY

From the car window on the COLORADO MIDLAND you can see Pike's Peak, the Collegiate Range, Mt. Massive, Hell Gate, Hagerman Pass, Red Rock Canon—all Colorado beauty spots. 28 28 28 28 28

Plan your Colorado or California trip so as to include a trip between Denver and Salt Lake City via the MIDLAND—the route through the Republic's play ground. 28



LOW RATES TO THE PACIFIC COAST
Write for Illustrated Colorado Literature
WORELL LAW, Gen. Agt.
566 Sheldley, Bldg.,
Kansas City, Missouri

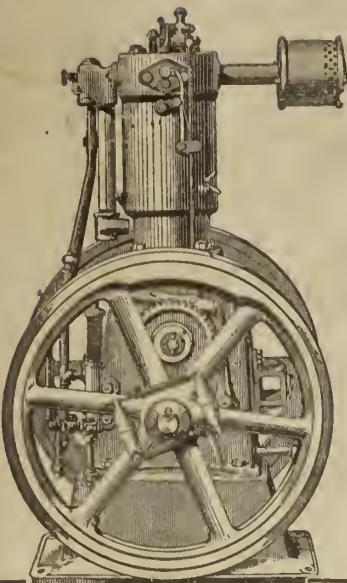
C. H. SPEERS, G. P. A.
Denver, Colorado

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

G. H. Strunk
TOPEKA BUSINESS COLLEGE, Topeka, Kans.



Gasoline Engine Superiority

When a man invests in a farm power, he owes it to himself to get the best that can be bought for the money.

The modern business farm can no longer be successfully operated without a power of some kind.

The best, most economical, and safest farm power is a gasoline engine.

The best engine is the

I. H. C. Gasoline Engine.

Why? Well, because it's so simple, easily kept in order and operated definitely. It develops the full rated horse power and sustains it against the heaviest load.

It is safer, cheaper and more efficient than steam power.

It is adaptable to any and every use requiring a power.

Among its many uses may be named:

Shelling, Husking and Shredding Corn; Grinding Feed; Cutting Dry Fodder and Ensilage; Pumping; Sawing Wood; Separating Cream, Etc.

I. H. C. engines are made in the following sizes and types:

Vertical, 2, 3, 5 Horse Power.

Horizontal, Portable and Stationary, 4, 6, 8, 10, 12, 15 Horse Power.

If interested in powers in any way, go to the International Local Agent and have him show you the I. H. C. gasoline engine, and supply you with catalogues, or write for further information.

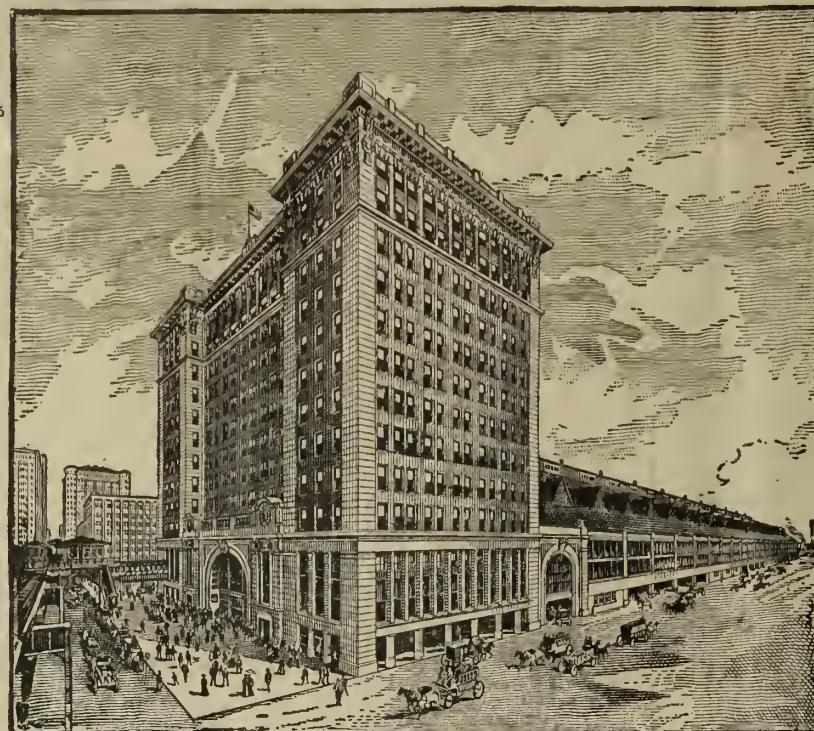
INTERNATIONAL HARVESTER COMPANY
OF AMERICA, CHICAGO, ILL., U. S. A.
(INCORPORATED)



La Salle
Street
Station,
Chicago



Only one
on the
Elevated
Loop



Used by Rock Island-Frisco Lines

Have YOU ever been in CHICAGO?

If so, you know the extremely convenient location of La Salle Street Station.

If you are a stranger in the city, however, it is of great importance that you learn about this magnificent and comparatively new terminal, used jointly by Rock Island-Frisco Lines—C. R. I. & P. Ry. and C. & E. I. R. R.

It is nearest the heart of the city—closely adjoining the business section—within easy walking distance of State Street shopping center and all the principal hotels.

Another advantage of entering the city through La Salle Street Station is the second-story viaduct directly connecting the main waiting-room with the Elevated Railroad loop—you can reach the North, Northwest, West or South sides of the city by elevated trains for a five cent fare without descending to the street. You thus avoid the dangers and delays of the great, crowded city.

The Rock Island right-of-way into Chicago is elevated for more than eight miles out through the suburbs. Prompt arrival at Chicago terminal is thus assured. Englewood Union Station, seven miles out, affords ready access to southern suburbs—all through trains stop there.

Where you will land is an item to consider.

JOHN SEBASTIAN, Passenger Traffic Manager, Rock Island-Frisco Lines, CHICAGO and ST. LOUIS.

The Southwest Limited

was the first train to give first-class service between Kansas City and Chicago. In service and equipment it has no equal. Your patronage is solicited on these two facts by the

Chicago, Milwaukee & St. Paul Railway

If you doubt the first fact compare the service of to-day with that before The Southwest Limited entered the field. If you doubt the second fact a trial trip to Chicago will convince you of its truth. The Southwest Limited leaves Union Station 5.55 p.m.; Grand Avenue 6.07 p.m. Arrives Union Station, Chicago, 8.20 a.m.

G. L. COBB
Southwestern Passenger Agent

907 Main Street
KANSAS CITY

Sanitary Hog Troughs

Will not rust or rot out and will last a life time. Every breeder should use them. Prices furnished on application.

Blue Valley Mfg. Company
Manhattan, Kansas

CAR-SUL

The Disinfectant Dip That Is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not gum the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

On care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Manufacturers of Shipping Tanks 1501-03 Bonanza St., Kansas City, Mo.

SEEDS That will Grow PLANTS
Now better, even at the high prices. Special Varieties. SEEDS 1 lb.
Annual Flowers, 10¢; 5 lbs. Vegetables, 10¢. PLANTS, 6 Rees. 25¢.
Geraniums, 25¢; 6 Begonias, 25¢; 4 Peacock Plants, 25¢. My catalog prices will
surprise you. Catalog and packet Royal Giant Narcissus free.

A. C. Anderson, Columbus, Nebraska.

STARK SEEDS best by Test—76 YEARS. We PAY CASH
WANT MORE SALESMEN PAY Weekly
Stark Nursery, Louisiana, Mo.; Huntsville, Ala.

SEED CORN

Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leamington and Riley's Favorite, best pedigreed and tested seed, grown on my own farms, \$1.50 per bu. Sacks free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, Illinois



\$80 TO \$175 PER MONTH

For Firemen and Brakemen. Experience unnecessary. Instructions by mail to your home. High wages guaranteed; rapid promotion.

We assist you in securing a position as soon as competent. Send to day.

Full particulars at once. Inclose stamp.

NATIONAL RAILWAY TRAINING SCHOOL, INC.,
Room 612 Boston Block, Minneapolis, Minn., U.S.A.